400 NEW CONSTRUCTION ADJUSTABLE LED FS-4 and FR-4 FLANGELESS TRIMS for SHEETROCK FRM2-S6/R6 and FRM2-S6/R6-CP HOUSINGS

Project Name		
Date		Туре
Prepared By		
Comments		
Catalog # 400	/ - / -	/ -



All No. 8 Lighting fixtures and components are UL Listed to both U.S. and Canadian requirements. No. 8 Lighting trims and lamp modules are protected by one or more U.S. Patents. No. 8 Lighting reserves the right to change details of design, materials, and finish.

Doc # 91268-13.3



PRODUCT FEATURES



NEW CONSTRUCTION LIGHT ENGINE AIRTIGHT and IC RATED



400 SERIES HOUSINGS FOR FLANGELESS TRIMS with SHEETROCK





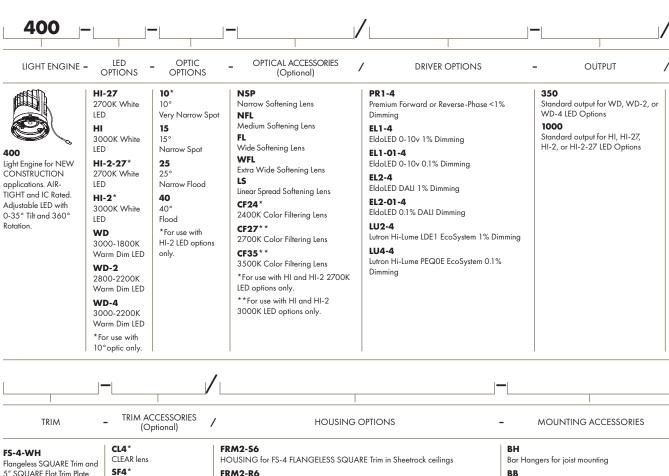
400 SERIES TRIMS FLANGELESS for SHEETROCK

400 w/ FLANGELESS TRIM for ACOUSTIC TILE - SPECIFICATION SUMMARY

	Static W	/hite		Warm Dimming						
LED Option	н	HI-2	WD	WD-2	WD-4					
Delivered Lumens	1037	1082	818	809	864					
System Wattage	14	14.5	15	15	15					
Efficacy	74	75	56	55	59					
CRI	94	94	97	97	97					
R9	60	63	82	78	76					
CCT Options	2700K, 3	000K	3000-1800K	2800-2200K	3000-2200K					
Optic Options	15, 25, 40	10		15, 25, 40						
Color Consistency	2-Ste	р		15, 25, 40 3-Step						
Optical Accessories	Narrow,	Medium, Wide, Extra	Wide, Linear Spread, and 2	400K, 2700K, 3500K Cold	or Filters					
Adjustability		0-	35° Tilt, 360° Rotation, Loc	kable						
Driver Options	<1% Forv		20v), 0.1/1% 0-10v (120- 1/1% EcoSystem (120 or 2)-277v),					
Trim Options			Round/Square Flat							
Finish Options			White							
Trim Mounting Options		Flang	eless: Sheetrock Ceiling App	olications						
Trim Accessories		UL Wet Listed	Lens Options - Clear, Soft F	ocus, Wall Wash						
Housing Options	Ne	ew Construction: Type I	C Air-Tight, Type IC-CP Rate	ed CCEA Approved Air-Tigl	nt					

Performance data shown with FS-4 Trim.
Static White data shown for 3000K.
Warm Dimming data shown for 3000K and 2800K.
See Performance Summaries for additional information.

PRODUCT SPECIFIER/PRODUCT ORDER NUMBER



5" SQUARE Flat Trim Plate with 2" Aperture - WHITE



FR-4-WH

Flangeless ROUND Trim and 5" ROUND Flat Trim Plate with 2" Aperture - WHITE



SOFT FOCUS lens

ww-4*

WALL WASH accessory *UL Wet listed.

HOUSING for FR-4 FLANGELESS ROUND Trim in Sheetrock ceilings

FRM2-S6-CP

CP Rated HOUSING for FS-4 FLANGELESS SQUARE Trim in Sheetrock ceilings

FRM2-R6-CP

CP Rated HOUSING for FR-4 FLANGELESS ROUND trim in sheetrock ceilings

*CCEA plenum rated for City of Chicago environmental air spaces and rated for direct contact with spray-foam insulation.

Butterfly Brackets for c-channel or bar mounting

TBC-BH

T-Bar Mounting Clips + Bar Hangers for T-Bar mounting

DMR

Panel Mounting Brackets (set of two) for direct mounting to wood panels

Light Engine, LED, Optic Option, and Accessory Notes

400 Fully adjustable Airtight and IC-Rated light engine for NEW CONSTRUCTION applications features patented tool-free adjustment mechanism. Meets Washington State Airtight Standard WAC 51-11-0502 and in accordance with ASTM E283 to reduce energy loss. Accommodates a wide range of ceiling thicknesses without affecting aiming or adjustment. Use for adjustable accent, wall wash*, and general lighting applications. *For wall washing: specify 40° optic option with HI, WD, WD-2 or WD-4 LED, or 10° optic option and FL lens with HI-2 LED. Requires WW-4 wall wash accessory. To ensure fixture to fixture color consistency, use of the same LED option with adjacent fixtures is recommended. One field interchangeable optic option included standard. Up to two additional optical accessories can be accommodated.

Housing and Installation Notes

Housing options include power supply, junction box, and mounting accessories. Rated for direct contact with standard or spray-foam* thermal insulation with a max combined R-Value of R42 (may also be in-stalled in Non-IC applications). CCEA* plenum rated for City of Chicago environmental air spaces. *For spray-foam or CCEA applications, specify FRM2-S6/R6-CP housing. For installations in direct contact with thermal insulation, ambient temperatures in ceiling space should not exceed $25\,^{\circ}\text{C}$ ($77\,^{\circ}\text{F}$) during normal operation. For installations where insulation is held back a minimum of 3" from sides and top, ambient temperatures in ceiling space should not exceed 40°C (104°F) during normal operation.

Driver and Output Option Notes

0-10v driver options are configured for linear control. DALI driver options are configured for logarithmic control. No.8 Lighting conducts extensive testing to establish compatibility with many dimmer types. For a complete list of compatible dimmers, see 8lighting.com/resources-downloads. Outputs vary depending on LED type, trim type, and optical accessories used. For photometric files in PDF and IES formats, see: 8lighting.com/400-series-photometry.

Trim Finish Notes

White trim finish is field paintable to match ceiling color. Lot variations may occur with specialty finishes. Ordering ALL trim kits at the same time is recommended to minimize finish variations.

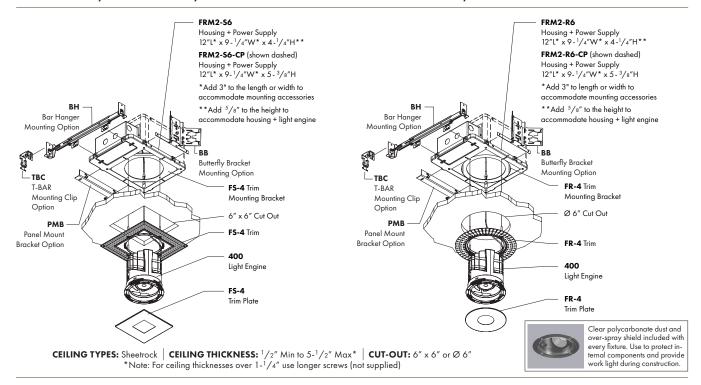
Trim Accessory Notes

Trim lens accessories are factory installed into trim plates and are UL WET LISTED and rated for use in DRY, DAMP, or WET locations (covered ceiling applications only). Approved for use in residential steam applications. Not for use in commercial steam application

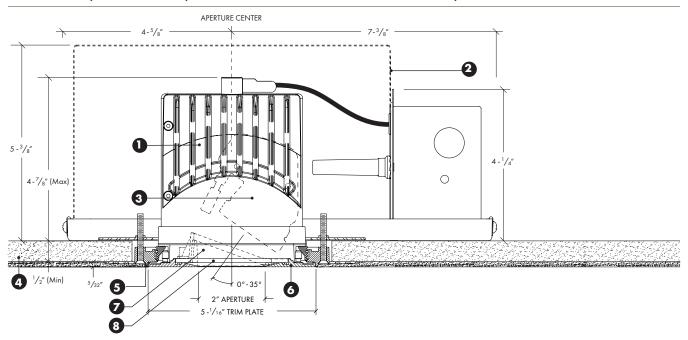
All No. 8 Lighting products are covered by a 5 year limited warranty. Products installed in residential steam applications are covered by a 2 year limited warranty. For specific warranty details and limitations, see: 8lighting.com/resources-downloads.

JA8-2025 CA Title 24 Compliant.

400 + FRM2-S6/R6 and FRM2-S6/R6-CP NEW CONSTRUCTION HOUSINGS with FS-4/FR-4 FLANGELESS TRIM



400 + FRM2-S6/R6 and FRM2-S6/R6-CP NEW CONSTRUCTION HOUSINGS with FS-4/FR-4 FLANGELESS TRIM



- 1) 400 NEW CONSTRUCTION Light Engine Airtight + IC Rated installs from below finished ceiling.
- 2) FRM2-S6/FRM2-R6 New Construction housing and power supply. For CCEA and sprayfoam ceiling applications, use FRM2-S6/R6-CP (shown dashed).
- 3) Adjustable LED & Optics Features 0°-35° tilt and 360° rotation with tool-less locking.
- 4) Ceiling Material (Sheetrock) Accommodates ceiling thicknesses from 1/2" (min) to 5-1/2" (max) without affecting aiming or rotation. Ceiling material must be rigid and able to support weight of fixture (approximately 5lbs.).
- 5) FS-4/FR-4 Flangeless Trim Flush mounts using 5/32" ceiling finish (drywall compound or plaster). Installs from below and sandwiches sheetrock through 6" cut-out. Standard screws (supplied) accommodate 1/2" to 1-1/4" thick sheetrock ceiling material. Use longer screws for ceilings over 1-1/4" thick.
- 6) FS-4/FR-4 Flat Trim Plate Features unique magnetic attachment. Mounts flush to finished ceiling.
- 7) WW-4 Wall Wash Accessory Lens (optional) Factory installed into trim plate. UL WET LISTED for use in DRY, DAMP, or WET locations (covered ceiling applications only). Approved for use in residential steam applications. Not for use in commercial steam applications.
- 8) CL4/SF4 Clear/Soft Focus Accessory Lens (optional) Factory installed into trim plate. UL WET LISTED for use in DRY, DAMP, or WET locations (covered ceiling applications only). Approved for use in residential steam applications. Not for use in commercial steam applications.

400 SERIES w/ FS-4 TRIM - PERFORMANCE SUMMARY

LED	OUTPUT	ССТ	CRI	R9	Delivered Lumens	System Wattage	Delivered LPW
HI-27	1000	2700K	94	60	819-964	14	59-69
н	1000	3000K	94	60	881-1037	14	63-74
HI-2-27	1000	2700K	94	63	1006	14.5	69
HI-2	1000	3000K	94	63	1082	14.5	75
WD	350	3000-1800K	97	82	694-818	15	48-56
WD-2	350	2800-2200K	97	78	686-809	15	47-55
WD-4	350	3000-2200K	97	76	732-864	15	50-59

Performance summary for HI LED with 15°, 25°, and 40° optic options and HI-2 LED with 10° optic option.

Performance summary for WD and WD-4 LED at 3000K and WD-2 LED at 2800K with 15°, 25°, and 40° optic options.

400 SERIES w/ FR-4 TRIM - PERFORMANCE SUMMARY

LED	OUTPUT	сст	CRI	R9	Delivered Lumens	System Wattage	Delivered LPW
HI-27	1000	2700K	94	60	811-955	14	58-68
н	1000	3000K	94	60	872-1027	14	62-73
HI-2-27	1000	2700K	94	63	1004	14.5	69
HI-2	1000	3000K	94	63	1080	14.5	74
WD	350	3000-1800K	97	81	708-840	15	48-58
WD-2	350	2800-2200K	97	78	700-835	15	48-57
WD-4	350	3000-2200K	97	76	721-855	15	49-58

Performance summary for **HI** LED with 15° , 25° , and 40° optic options and **HI-2** LED with 10° optic option.

Performance summary for WD and WD-4 LED at 3000K and WD-2 LED at 2800K with 15° , 25° , and 40° optic options.

400 SERIES w/FS-4 TRIM + WW-4 WALL WASH ACCESSORY - PERFORMANCE SUMMARY

LED	OUTPUT	сст	CRI	R9	Delivered Lumens	System Wattage	Delivered LPW
HI-27	1000	2700K	94	60	652	14	47
н	1000	3000K	94	60	701	14	50
HI-2-27	1000	2700K	94	64	504	14.5	35
HI-2	1000	3000K	94	64	542	14.5	37
WD	350	3000-1800K	97	82	548	15	38
WD-2	350	2800-2200K	97	80	543	15	37
WD-4	350	3000-2200K	97	78	580	15	40

Performance summary for HI LED with 40° optic option and HI-2 LED with 10° optic + FL lens option.

Performance summary for WD and WD-4 LED at 3000K and WD-2 LED at 2800K with 15°, 25°, and 40° optic options.

400 SERIES w/ FR-4 TRIM + WW-4 WALL WASH ACCESSORY - PERFORMANCE SUMMARY

LED	OUTPUT	ССТ	CRI	R9	Delivered Lumens	System Wattage	Delivered LPW	
HI-27	1000	2700K	94	60	659	14	47	
н	1000	3000K	94	60	709	14	51	
HI-2-27	1000	2700K	94	64	509	14.5	35	
HI-2	1000	3000K	94	64	547	14.5	38	
WD	350	3000-1800K	97	82	584	15	40	
WD-2	350	2800-2200K	97	80	560	15	38	
WD-4	350	3000-2200K	97	77	587	15	40	

Performance summary for \mathbf{HI} LED with 40° optic option and $\mathbf{HI-2}$ LED with 10° optic + \mathbf{FL} lens option.

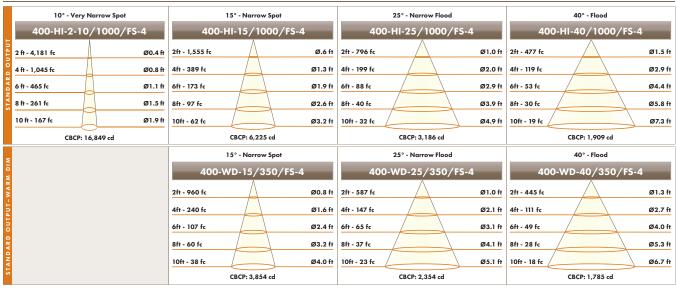
Performance summary for WD and WD-4 LED at 3000K and WD-2 LED at 2800K with 15° , 25° , and 40° optic options.

400 SERIES - OPTICAL OPTIONS AND ACCESSORY PERFORMANCE SUMMARY

OPTIC OPTIONS	LED	BEAM ENHANCING LENS (OPTIONAL)*								
OPTIC OPTIONS	OPTIONS	+ NSP	+ NFL	+ FL	+ WFL	+ LS				
10° Very Narrow Spot	HI-2	14°	25°	41°	44°	14° x 26°				
15° Narrow Spot	HI	21°	30°	48°	56°	21° x 35°				
15° Narrow Spot	WD/WD-2/WD-4	24°	32°	49°	56°	24° x 46°				
25° Narrow Flood	HI	28°	35°	51°	59°	29° x 47°				
25° Narrow Flood	WD/WD-2/WD-4	29°	35°	51°	58°	31° x 44°				
40° Flood	HI	41°	44°	59°	66°	42° x 53°				
40° Flood	WD/WD-2/WD-4	37°	42°	55°	62°	39° x 50°				

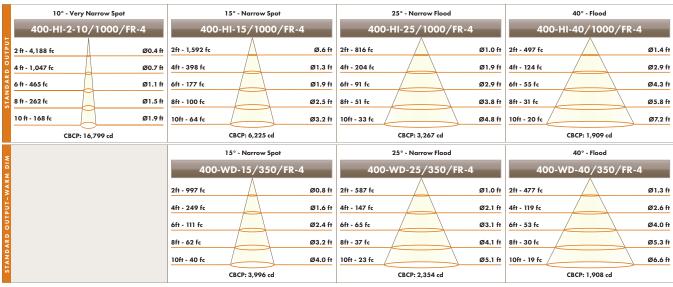
^{*}Beam enhancing lens used in combination with 10°, 15°, 25°, or 40° optic to achieve desired beam spread.

400 SERIES w/FS-4 TRIM - CONE OF LIGHT DIAGRAMS



Performance shown for 3000K. Output varies by CCT.

400 SERIES w/FR-4 TRIM - CONE OF LIGHT DIAGRAMS



Performance shown for 3000K. Output varies by CCT.

400-HI-40 w/FS-4 TRIM + WW-4 WALL WASH ACCESSORY - FOOTCANDLES ON WALL

DISTANCE	DISTANCE TO WALL				2.0 ft							2.5 ft					
ON CENTER	SPAC	ING		2.0 ft			2.5 ft			2.5 ft			3.0 ft				
		0.5 ft	0.4	3.0	0.4	0.4	0.2	0.4	0.1	0.1	0.1	0.1	0.1	0.1			
1	1.5 ft	28.9	31.1	28.9	25.8	25.3	25.8	13.3	13.9	13.3	12.1	11.3	12.1				
2.5 f		2.5 ft	32.7	36.4	32.7	29.2	32.3	29.2	22.2	24.3	22.2	20.2	21.5	20.2			
		3.5 ft	21.9	23.8	21.9	19.9	22.4	19.9	19.0	21.1	19.0	17.3	19.6	17.3			
•	4.5 ft	13.3	14.2	13.3	12.5	13.6	12.5	13.3	14.5	13.3	12.4	13.8	12.4				
		5.5 ft	8.3	8.7	8.3	7.9	8.4	7.9	9.0	9.6	9.0	8.5	9.2	8.5			
	DISTANCE	6.5 ft	5.4	5.6	5.4	5.2	5.5	5.2	6.1	6.4	6.1	5.8	6.3	5.8			
TSIQ 7.		7.5 ft	3.6	3.7	3.6	3.5	3.7	3.5	4.2	4.4	4.2	4.1	4.3	4.1			
8.5		8.5 ft	2.6	2.6	2.6	2.5	2.6	2.5	3.0	3.2	3.0	3.0	3.1	3.0			
		9.5 ft	1.9	1.9	1.9	1.8	1.9	1.8	2.2	2.3	2.2	2.2	2.3	2.2			

Note: With **HI** LED option, use 40° optic and 20° aiming angle for optimal performance. Data shown for 3000K CCT.

400-HI-2-10-FL w/ FS-4 TRIM + WW-4 WALL WASH ACCESSORY - FOOTCANDLES ON WALL

DISTANCE	TO WA	ALL			2.0) ft			2.5 ft					
ON CENTER	SPAC	ING		2.0 ft			2.5 ft			2.5 ft			3.0 ft	
		0.5 ft	0.4	0.4	0.4	0.4	0.3	0.4	0.1	0.1	0.1	0.1	0.1	0.1
		1.5 ft	18.3	19.3	18.3	16.7	14.9	16.7	7.5	7.6	7.5	7.0	5.9	7.0
Z		2.5 ft	23.7	26.3	23.7	21.2	22.8	21.2	15.4	17.0	15.4	14.1	14.6	14.1
	GEILI	3.5 ft	16.7	18.2	16.7	15.1	16.7	15.1	14.0	15.5	14.0	12.8	14.1	12.8
	FROM		10.5	11.2	10.5	9.8	10.6	9.8	10.2	11.1	10.2	9.5	10.4	9.5
		5.5 ft	6.7	7.0	6.7	6.3	6.7	6.3	7.0	7.5	7.0	6.6	7.2	6.6
	DISTANCE	6.5 ft	4.3	4.5	4.3	4.2	4.4	4.2	4.9	5.1	4.9	4.6	4.9	4.6
	7.5 ft		3.0	3.0	3.0	2.9	3.0	2.9	3.4	3.6	3.4	3.3	3.5	3.3
		8.5 ft	2.1	2.1	2.1	2.0	2.1	2.0	2.5	2.5	2.5	2.4	2.5	2.4
		9.5 ft	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.9	1.8	1.8	1.8	1.8

Note: With HI-2 LED option, use 10° optic + FL lens and 20° aiming angle for optimal performance. Data shown for 3000K CCT.

400-WD-40 w/ FS-4 TRIM + WW-4 WALL WASH ACCESSORY - FOOTCANDLES ON WALL

DISTANCE	TO W	ALL			2.0) ft			2.5 ft					
ON CENTER	SPAC	ING		2.0 ft			2.5 ft			2.5 ft			3.0 ft	
		0.5 ft	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
		1.5 ft	17.0	18.6	17.0	15.4	15.0	15.4	7.2	7.5	7.2	6.8	6.1	6.8
CEILING 3	2.5 ft	22.9	26.3	22.9	20.5	23.0	20.5	14.3	16.2	14.3	13.1	14.1	13.1	
	3.5 ft	17.0	19.4	17.0	15.2	17.9	15.2	13.8	16.0	13.8	12.6	14.6	12.6	
	WO	4.5 ft	10.9	12.0	10.9	10.0	11.4	10.0	10.4	11.9	10.4	9.6	11.2	9.6
	ш	5.5 ft	7.0	7.5	7.0	6.5	7.2	6.5	7.3	8.1	7.3	6.8	7.8	6.8
	DISTANC	6.5 ft	4.6	4.8	4.6	4.4	4.7	4.4	5.1	5.5	5.1	4.8	5.3	4.8
	DIST/		3.1	3.3	3.1	3.0	3.2	3.0	3.6	3.8	3.6	3.4	3.7	3.4
		8.5 ft	2.2	2.3	2.2	2.1	2.2	2.1	2.6	2.7	2.6	2.5	2.7	2.5
		9.5 ft	1.6	1.7	1.6	1.6	1.6	1.6	1.9	2.0	1.9	1.9	2.0	1.9

 $Note: With \ \textbf{WD, WD-2}, \ or \ \textbf{WD-4} \ LED \ option, \ use \ 40° \ optic \ and \ 20° \ aiming \ angle \ for \ optimal \ performance. \ Data \ shown \ for \ 3000K \ CCT.$

400-HI-40 w/FR-4 TRIM + WW-4 WALL WASH ACCESSORY - FOOTCANDLES ON WALL

DISTANCE	ALL	2.0 ft							2.5 ft					
ON CENTE	R SPAC	ING	9	2.0 ft	•	9	2.5 ft	•	9	2.5 ft	•	9	3.0 ft	•
		0.5 ft	0.3	0.2	0.3	0.3	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1
	<u>o</u>	1.5 ft	28.1	31.3	28.1	25.4	25.8	25.4	12.9	13.9	12.9	12.1	11.4	12.1
CEILING		2.5 ft	32.1	36.9	32.1	28.6	33.0	28.6	21.6	24.5	21.6	19.7	21.8	19.7
		3.5 ft	21.9	24.6	21.9	19.7	23.2	19.7	18.8	21.6	18.8	17.0	20.0	17.0
	FROM	4.5 ft	13.6	14.8	13.6	12.5	14.3	12.5	13.4	15.0	13.4	12.3	14.3	12.3
			8.6	9.1	8.6	8.0	8.9	8.0	9.1	10.0	9.1	8.5	9.6	8.5
	DISTANCE	6.5 ft	5.6	5.9	5.6	5.3	5.8	5.3	6.3	6.7	6.3	5.9	6.6	5.9
DIST		7.5 ft	3.8	4.0	3.8	3.7	3.9	3.7	4.4	4.7	4.4	4.2	4.6	4.2
		8.5 ft	2.7	2.8	2.7	2.6	2.8	2.6	3.2	3.3	3.2	3.1	3.3	3.1
		9.5 ft	2.0	2.0	2.0	1.9	2.0	1.9	2.4	2.4	2.4	2.3	2.4	2.3

Note: With **HI** LED option, use 40° optic and 20° aiming angle for optimal performance. Data shown for 3000K CCT.

400-HI-2-10-FL w/ FR-4 TRIM + WW-4 WALL WASH ACCESSORY - FOOTCANDLES ON WALL

DISTANCE	TO WA	ALL			2.0) ft			2.5 ft					
ON CENTER	SPAC	ING	9	2.0 ft	(9)	9	2.5 ft	(9)	9	2.5 ft	(9)	9	3.0 ft	9
		0.5 ft	0.5	0.4	0.5	0.5	0.3	0.5	0.2	0.2	0.2	0.2	0.2	0.2
		1.5 ft	19.5	21.2	19.5	17.6	16.9	17.6	8.4	8.7	8.4	7.8	7.1	7.8
CEILING	2.5 ft	23.8	26.9	23.8	21.2	23.7	21.2	15.7	17.6	15.7	14.3	15.6	14.3	
	CEILI	3.5 ft	16.7	18.4	16.7	15.2	17.1	15.2	14.1	15.8	14.1	12.9	14.6	12.9
	FROM	4.5 ft	10.6	11.3	10.6	9.8	10.8	9.8	10.2	11.2	10.2	9.5	10.7	9.5
		5.5 ft	6.7	7.1	6.7	6.4	6.8	6.4	7.1	7.6	<i>7</i> .1	6.7	7.3	6.7
	ANG	6.5 ft	4.4	4.6	4.4	4.2	4.5	4.2	4.9	5.2	4.9	4.7	5.0	4.7
DISTANCE	7.5 ft	3.0	3.1	3.0	2.9	3.0	2.9	3.5	3.6	3.5	3.3	3.5	3.3	
		8.5 ft	2.1	2.2	2.1	2.1	2.1	2.1	2.5	2.6	2.5	2.4	2.5	2.4
		9.5 ft	1.5	1.6	1.5	1.5	1.6	1.5	1.8	1.9	1.8	1.8	1.9	1.8

Note: With HI-2 LED option, use 10° optic + FL lens and 20° aiming angle for optimal performance. Data shown for 3000K CCT.

400-WD-40 w/ FR-4 TRIM + WW-4 WALL WASH ACCESSORY - FOOTCANDLES ON WALL

DISTANCE TO WALL			2.0 ft						2.5 ft					
ON CENTER SPACING			9	2.0 ft	9	9	2.5 ft	9	9	2.5 ft	(9)	9	3.0 ft	9
		0.5 ft	0.3	0.2	0.3	0.3	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1
•	CE FROM CEILING	1.5 ft	20.7	23.1	20.7	18.6	18.3	18.6	9.1	10.0	9.1	8.4	8.9	8.4
		2.5 ft	26.5	30.3	26.5	23.5	26.4	23.5	17.0	19.2	17.0	15.4	16.6	15.4
		3.5 ft	19.0	21.2	19.0	17.0	19.6	17.0	15.8	18.0	15.8	14.3	16.4	14.3
		4.5 ft	12.0	12.9	12.0	11.1	12.3	11.1	11.6	12.9	11.6	10.7	12.2	10.7
		5.5 ft	7.6	8.0	7.6	7.2	7.7	7.2	8.0	8.7	8.0	7.5	8.3	7.5
	DISTANC	6.5 ft	5.0	5.2	5.0	4.8	5.1	4.8	5.6	5.9	5.6	5.3	5.7	5.3
	DIS	7.5 ft	3.4	3.5	3.4	3.3	3.4	3.3	3.9	4.1	3.9	3.8	4.0	3.8
		8.5 ft	2.4	2.5	2.4	2.3	2.4	2.3	2.8	2.9	2.8	2.7	2.9	2.7
		9.5 ft	1.7	1.8	1.7	1.7	1.8	1.7	2.1	2.2	2.1	2.0	2.1	2.0

 $Note: With \ \textbf{WD, WD-2}, \ or \ \textbf{WD-4} \ LED \ option, \ use \ 40° \ optic \ and \ 20° \ aiming \ angle \ for \ optimal \ performance. \ Data \ shown \ for \ 3000K \ CCT.$