

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P333996

Luminaire Tested: **S123DS-S560D840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333996
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-11)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DS-S560D840-4F0-1E-UDD-F
Description: DEFINE 3 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 560 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2194.7 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

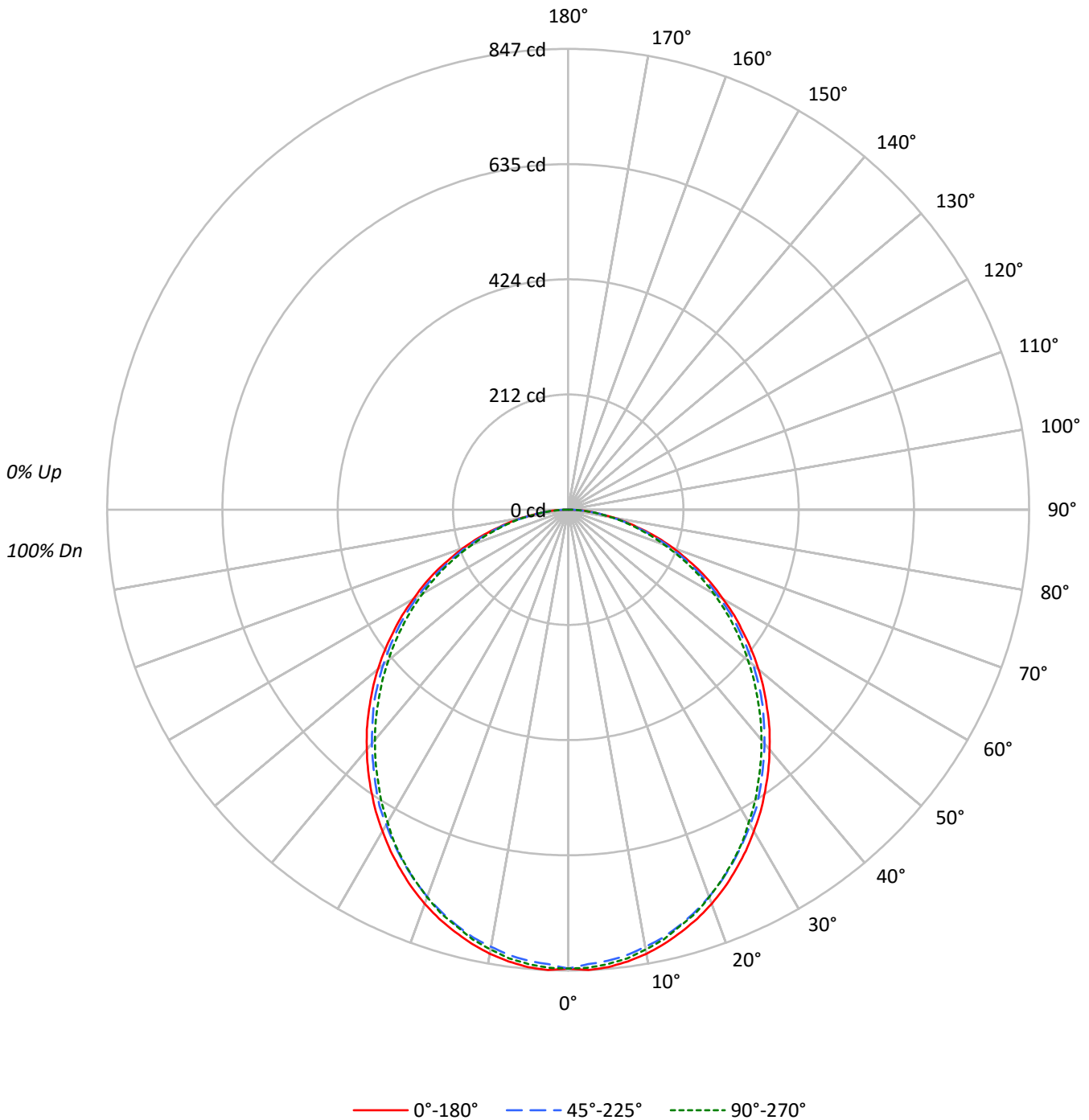
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70					70			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59					59			
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44					44			
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39					39			
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28					28			
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9077	9077	9077
5°	9119	8994	9057
10°	9059	8916	8971
15°	8953	8816	8831
20°	8829	8671	8679
25°	8664	8500	8482
30°	8480	8310	8247
35°	8289	8109	8004
40°	8089	7886	7763
45°	7870	7683	7494
50°	7649	7432	7224
55°	7362	7171	6953
60°	7072	6867	6650
65°	6816	6538	6334
70°	6436	6162	5888
75°	5881	5669	5427
80°	5306	5077	5033
85°	4656	4483	4298



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.5	3.6
10°-20°	224.5	10.2
20°-30°	331.5	15.1
30°-40°	387.2	17.6
40°-50°	389.3	17.7
50°-60°	341.9	15.6
60°-70°	254.7	11.6
70°-80°	144.9	6.6
80°-90°	41.2	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	635.5	29.0
0°-40°	1022.7	46.6
0°-60°	1753.9	79.9
0°-90°	2194.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2194.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	843	843	843	843	843	
5°	844	840	832	840	838	80
15°	803	800	791	797	792	227
25°	730	725	716	716	714	336
35°	631	626	617	613	609	395
45°	517	514	505	496	492	399
55°	392	392	382	374	370	351
65°	268	264	257	251	249	264
75°	141	138	136	133	130	151
85°	38	36	36	35	35	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	843.3	843.3	843.3	843.3	843.3
2.5°	846.9	844.0	836.1	843.3	842.6
5°	844.0	840.4	832.4	839.7	838.2
7.5°	837.5	833.9	825.9	832.4	831.7
10°	828.8	825.2	815.7	822.3	820.8
12.5°	817.2	814.3	805.6	809.9	809.2
15°	803.4	800.5	791.1	796.9	792.5
17.5°	788.2	784.6	775.1	779.5	778.0
20°	770.8	766.4	757.0	759.9	757.7
22.5°	751.2	746.9	737.4	739.6	736.7
25°	729.5	725.1	715.7	716.4	714.2
27.5°	707.0	702.6	692.5	693.2	691.0
30°	682.3	678.7	668.6	668.6	663.5
32.5°	657.7	652.6	645.3	640.3	638.1
35°	630.8	626.5	617.1	612.7	609.1
37.5°	604.0	598.2	588.8	583.7	581.5
40°	575.7	571.4	561.2	555.4	552.5
42.5°	547.5	542.4	532.2	526.4	523.5
45°	517.0	514.1	504.7	496.0	492.3
47.5°	487.3	482.9	474.2	465.5	462.6
50°	456.8	453.2	443.8	435.8	431.4
52.5°	424.9	422.7	412.6	406.1	401.7
55°	392.3	391.6	382.1	374.2	370.5
57.5°	361.8	358.9	351.7	344.4	340.1
60°	328.5	327.7	319.0	312.5	308.9
62.5°	298.7	296.6	287.9	281.3	279.2
65°	267.6	263.9	256.7	250.9	248.7
67.5°	234.2	231.3	225.5	220.4	217.5
70°	204.5	200.1	195.8	190.7	187.1
72.5°	173.3	170.4	165.3	161.0	159.5
75°	141.4	138.5	136.3	132.7	130.5
77.5°	113.1	111.7	108.8	105.9	105.9
80°	85.6	83.4	81.9	81.2	81.2
82.5°	58.7	58.7	58.7	57.3	56.6
85°	37.7	36.3	36.3	34.8	34.8
87.5°	18.9	16.7	16.0	15.2	15.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)