

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: P243121

Luminaire Tested: **S122DR-H485D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243121
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-48)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DR-H485D835-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1840.6 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

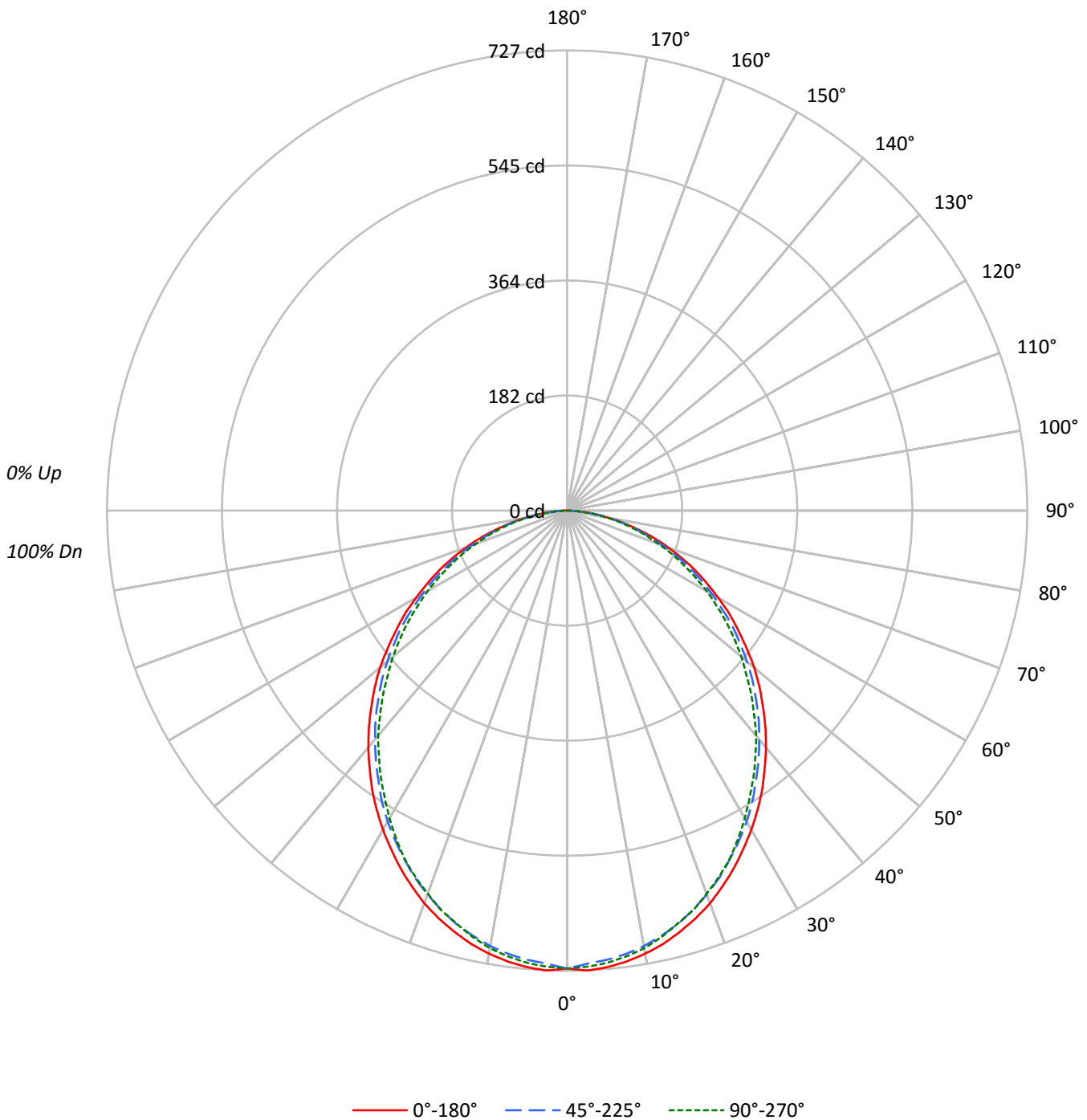
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	95	92	94	91	89	90	88	86	84				84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71				71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60				60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51				51
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45				45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39				39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35				35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31				31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28				28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26				26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13777	13777	13777
5°	13843	13627	13715
10°	13746	13514	13578
15°	13581	13330	13317
20°	13378	13080	13054
25°	13100	12778	12764
30°	12801	12477	12345
35°	12494	12092	11936
40°	12152	11736	11555
45°	11780	11368	11079
50°	11438	10985	10647
55°	10959	10584	10185
60°	10488	10084	9703
65°	10037	9555	9136
70°	9429	8950	8504
75°	8589	8243	7853
80°	7459	7240	6943
85°	6403	5682	5245



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.1	3.7
10°-20°	191.7	10.4
20°-30°	281.9	15.3
30°-40°	327.3	17.8
40°-50°	326.8	17.8
50°-60°	284.7	15.5
60°-70°	210.5	11.4
70°-80°	118.7	6.4
80°-90°	30.9	1.7
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°	541.7	29.4
0°-40°	869.0	47.2
0°-60°	1480.5	80.4
0°-90°	1840.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1840.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	723	723	723	723	723	
5°	724	721	713	719	717	69
15°	689	685	676	679	675	194
25°	623	618	608	607	607	287
35°	537	531	520	515	513	336
45°	437	433	422	415	411	338
55°	330	327	319	310	307	296
65°	223	219	212	205	203	220
75°	117	116	112	108	107	124
85°	29	28	26	25	24	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	723.3	723.3	723.3	723.3	723.3
2.5°	727.3	724.0	716.7	722.7	721.3
5°	724.0	720.7	712.7	718.7	717.3
7.5°	718.7	715.3	706.7	712.7	710.7
10°	710.7	706.7	698.7	702.7	702.0
12.5°	701.3	697.3	688.0	691.3	690.0
15°	688.7	685.3	676.0	678.7	675.3
17.5°	675.3	670.0	661.3	664.0	662.0
20°	660.0	654.7	645.3	646.7	644.0
22.5°	642.0	636.7	628.0	628.0	626.7
25°	623.3	618.0	608.0	607.3	607.3
27.5°	602.7	598.0	588.0	586.0	584.7
30°	582.0	578.0	567.3	563.3	561.3
32.5°	560.0	554.7	544.7	540.0	536.7
35°	537.3	531.3	520.0	515.3	513.3
37.5°	512.7	506.7	496.7	492.7	488.7
40°	488.7	483.3	472.0	466.0	464.7
42.5°	463.3	458.0	448.0	441.3	437.3
45°	437.3	432.7	422.0	415.3	411.3
47.5°	412.0	406.7	397.3	389.3	384.0
50°	386.0	380.7	370.7	361.3	359.3
52.5°	357.3	354.0	344.0	335.3	332.7
55°	330.0	327.3	318.7	310.0	306.7
57.5°	304.0	300.7	290.7	284.0	280.0
60°	275.3	273.3	264.7	257.3	254.7
62.5°	248.7	246.0	238.7	231.3	228.0
65°	222.7	219.3	212.0	205.3	202.7
67.5°	196.0	192.7	186.7	181.3	178.7
70°	169.3	166.7	160.7	156.0	152.7
72.5°	143.3	140.7	135.3	130.7	130.0
75°	116.7	116.0	112.0	108.0	106.7
77.5°	92.0	91.3	88.7	86.7	85.3
80°	68.0	68.0	66.0	64.0	63.3
82.5°	46.7	47.3	45.3	44.0	44.0
85°	29.3	28.0	26.0	24.7	24.0
87.5°	12.0	10.0	9.3	7.3	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)