

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: P243125

Luminaire Tested: **S122DR-H485D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243125
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-H485D840-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1858.8 lumens
Efficiency: N/A
Efficacy: 108.1 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

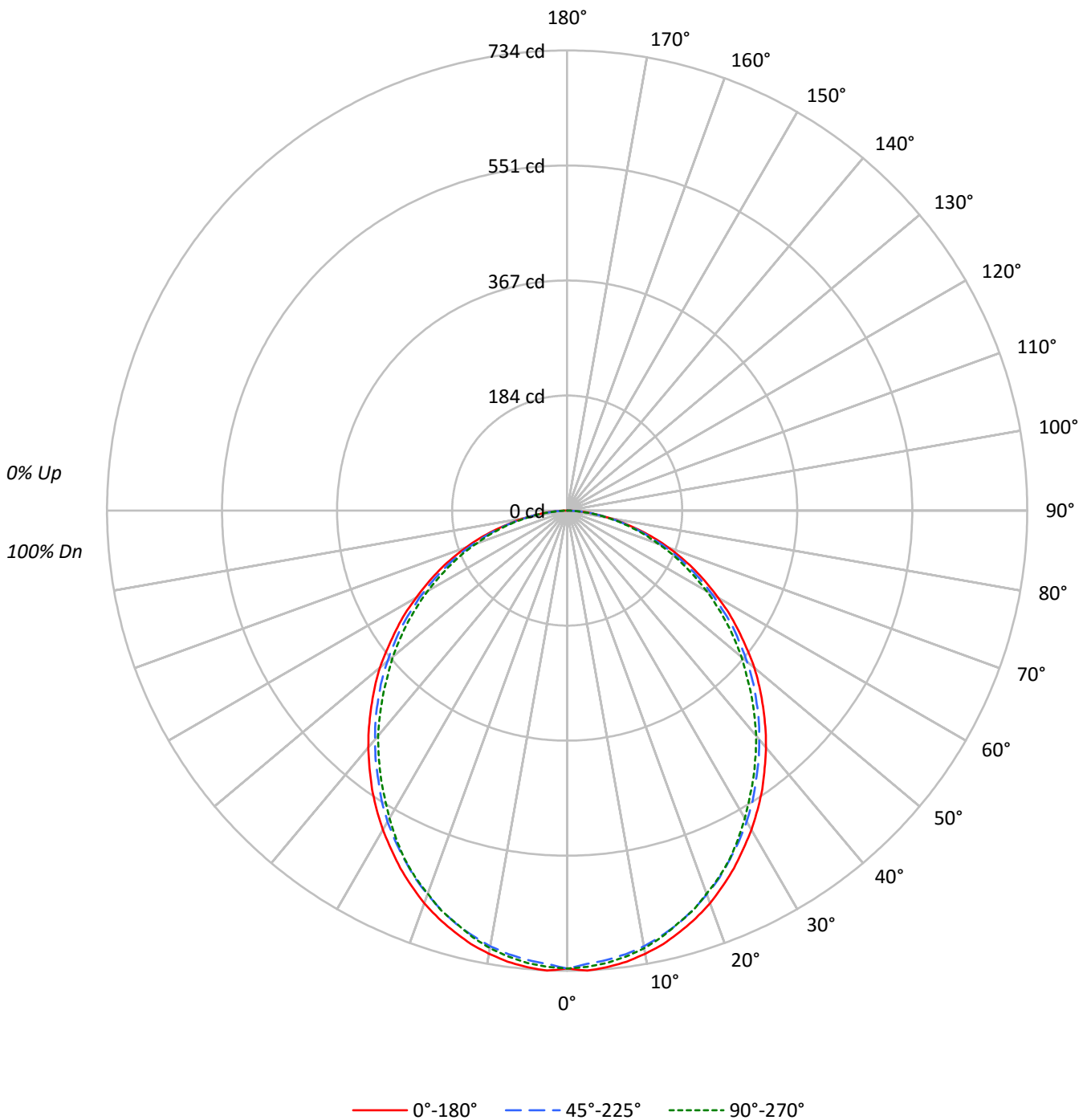
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13914	13914	13914
5°	13981	13761	13851
10°	13881	13647	13711
15°	13715	13463	13449
20°	13510	13210	13184
25°	13230	12904	12890
30°	12928	12601	12469
35°	12617	12210	12054
40°	12271	11853	11669
45°	11898	11481	11190
50°	11551	11092	10754
55°	11068	10687	10285
60°	10594	10183	9798
65°	10136	9650	9226
70°	9523	9039	8588
75°	8669	8324	7926
80°	7536	7316	7020
85°	6469	5748	5289



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.8	3.7
10°-20°	193.6	10.4
20°-30°	284.6	15.3
30°-40°	330.5	17.8
40°-50°	330.1	17.8
50°-60°	287.5	15.5
60°-70°	212.6	11.4
70°-80°	119.8	6.4
80°-90°	31.3	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°	547.0	29.4
0°-40°	877.5	47.2
0°-60°	1495.1	80.4
0°-90°	1858.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1858.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	731	728	720	726	724	69
15°	696	692	683	685	682	196
25°	630	624	614	613	613	290
35°	543	537	525	520	518	339
45°	442	437	426	419	415	341
55°	333	331	322	313	310	299
65°	225	222	214	207	205	222
75°	118	117	113	109	108	125
85°	30	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°	730.5	730.5	730.5	730.5	730.5
2.5°	734.5	731.2	723.8	729.8	728.5
5°	731.2	727.8	719.7	725.8	724.4
7.5°	725.8	722.4	713.7	719.7	717.7
10°	717.7	713.7	705.6	709.6	708.9
12.5°	708.3	704.2	694.8	698.2	696.8
15°	695.5	692.1	682.7	685.4	682.0
17.5°	682.0	676.6	667.9	670.6	668.5
20°	666.5	661.1	651.7	653.1	650.4
22.5°	648.3	643.0	634.2	634.2	632.9
25°	629.5	624.1	614.0	613.3	613.3
27.5°	608.6	603.9	593.8	591.8	590.4
30°	587.8	583.7	572.9	568.9	566.9
32.5°	565.5	560.2	550.1	545.3	542.0
35°	542.6	536.6	525.1	520.4	518.4
37.5°	517.7	511.7	501.6	497.5	493.5
40°	493.5	488.1	476.7	470.6	469.3
42.5°	467.9	462.5	452.4	445.7	441.7
45°	441.7	436.9	426.2	419.4	415.4
47.5°	416.1	410.7	401.3	393.2	387.8
50°	389.8	384.4	374.3	364.9	362.9
52.5°	360.9	357.5	347.4	338.6	336.0
55°	333.3	330.6	321.8	313.1	309.7
57.5°	307.0	303.6	293.5	286.8	282.8
60°	278.1	276.0	267.3	259.9	257.2
62.5°	251.1	248.4	241.0	233.6	230.3
65°	224.9	221.5	214.1	207.4	204.7
67.5°	197.9	194.6	188.5	183.1	180.4
70°	171.0	168.3	162.3	157.5	154.2
72.5°	144.8	142.1	136.7	132.0	131.3
75°	117.8	117.1	113.1	109.1	107.7
77.5°	92.9	92.2	89.5	87.5	86.2
80°	68.7	68.7	66.7	64.6	64.0
82.5°	47.1	47.8	45.8	44.4	44.4
85°	29.6	28.3	26.3	24.9	24.2
87.5°	12.1	10.1	9.4	7.4	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)