

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: P243126

Luminaire Tested: **S122DR-H675D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243126
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-H675D840-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: 2603.2 lumens
Efficiency: N/A
Efficacy: 110.3 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

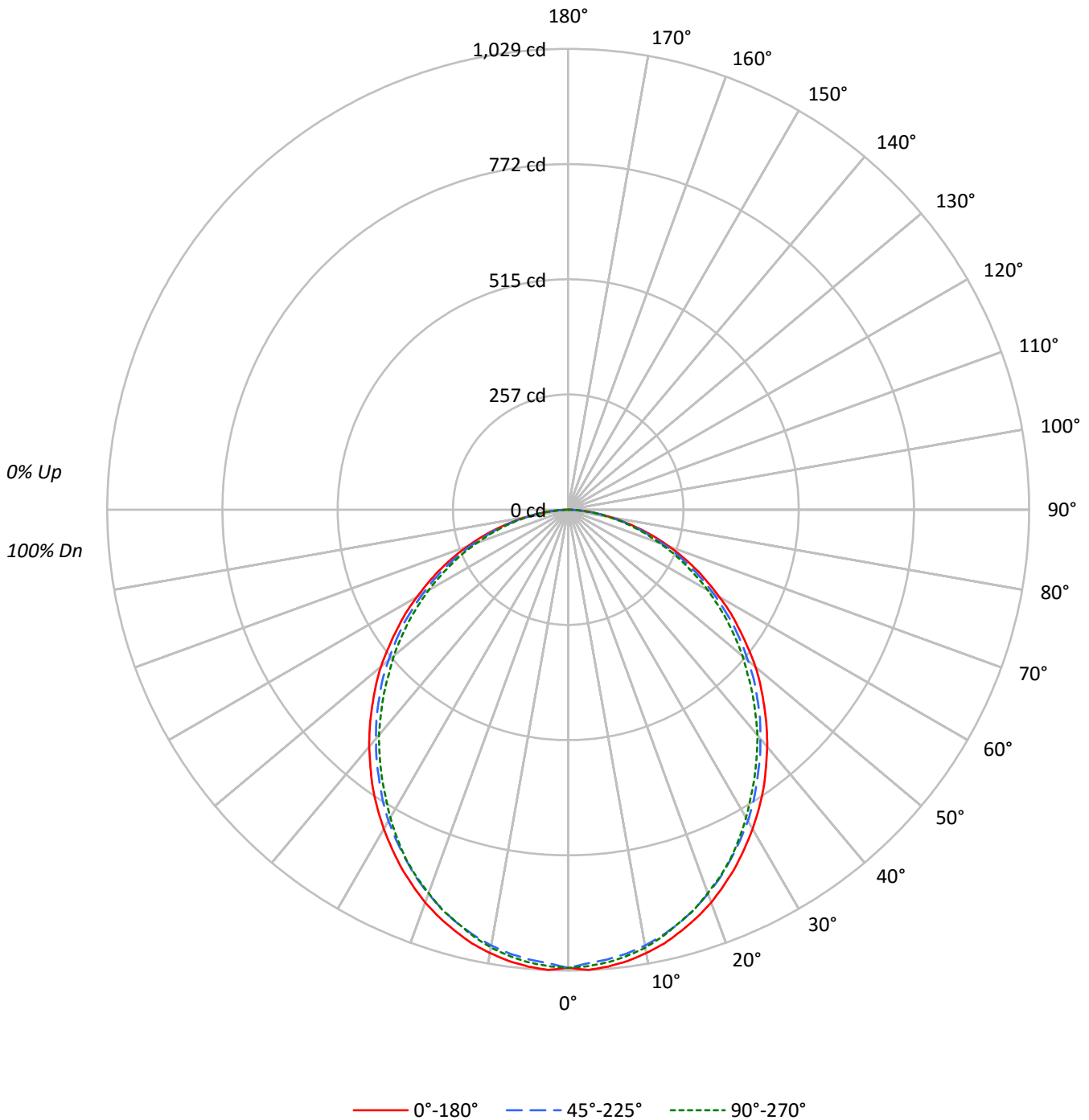
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	19486	19486	19486
5°	19579	19273	19400
10°	19440	19113	19204
15°	19207	18854	18834
20°	18922	18501	18462
25°	18528	18072	18053
30°	18104	17648	17461
35°	17672	17103	16882
40°	17184	16600	16341
45°	16661	16079	15672
50°	16177	15534	15059
55°	15498	14967	14403
60°	14834	14259	13722
65°	14193	13512	12917
70°	13338	12653	12024
75°	12143	11657	11105
80°	10552	10234	9828
85°	9070	8043	7409



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.3	3.7
10°-20°	271.1	10.4
20°-30°	398.7	15.3
30°-40°	462.9	17.8
40°-50°	462.3	17.8
50°-60°	402.6	15.5
60°-70°	297.7	11.4
70°-80°	167.8	6.4
80°-90°	43.8	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°	766.1	29.4
0°-40°	1229.0	47.2
0°-60°	2093.9	80.4
0°-90°	2603.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2603.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1023	1023	1023	1023	1023	
5°	1024	1019	1008	1016	1015	97
15°	974	969	956	960	955	275
25°	882	874	860	859	859	406
35°	760	752	736	729	726	475
45°	618	612	597	587	582	478
55°	467	463	451	438	434	418
65°	315	310	300	290	287	311
75°	165	164	158	153	151	175
85°	42	40	37	35	34	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1023.0	1023.0	1023.0	1023.0	1023.0
2.5°	1028.7	1024.0	1013.6	1022.1	1020.2
5°	1024.0	1019.3	1008.0	1016.4	1014.6
7.5°	1016.4	1011.7	999.5	1008.0	1005.1
10°	1005.1	999.5	988.2	993.8	992.9
12.5°	991.9	986.3	973.1	977.8	975.9
15°	974.0	969.3	956.1	959.9	955.1
17.5°	955.1	947.6	935.3	939.1	936.3
20°	933.5	925.9	912.7	914.6	910.8
22.5°	908.0	900.5	888.2	888.2	886.3
25°	881.6	874.1	859.9	859.0	859.0
27.5°	852.4	845.8	831.6	828.8	826.9
30°	823.1	817.5	802.4	796.7	793.9
32.5°	792.0	784.5	770.3	763.7	759.0
35°	760.0	751.5	735.5	728.9	726.0
37.5°	725.1	716.6	702.5	696.8	691.1
40°	691.1	683.6	667.6	659.1	657.2
42.5°	655.3	647.8	633.6	624.2	618.5
45°	618.5	611.9	596.9	587.4	581.8
47.5°	582.7	575.2	562.0	550.6	543.1
50°	545.9	538.4	524.2	511.0	508.2
52.5°	505.4	500.7	486.5	474.3	470.5
55°	466.7	463.0	450.7	438.4	433.7
57.5°	430.0	425.2	411.1	401.7	396.0
60°	389.4	386.6	374.3	364.0	360.2
62.5°	351.7	347.9	337.6	327.2	322.5
65°	314.9	310.2	299.8	290.4	286.6
67.5°	277.2	272.5	264.0	256.5	252.7
70°	239.5	235.7	227.2	220.6	215.9
72.5°	202.7	199.0	191.4	184.8	183.9
75°	165.0	164.1	158.4	152.7	150.9
77.5°	130.1	129.2	125.4	122.6	120.7
80°	96.2	96.2	93.3	90.5	89.6
82.5°	66.0	66.9	64.1	62.2	62.2
85°	41.5	39.6	36.8	34.9	33.9
87.5°	17.0	14.1	13.2	10.4	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)