

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: P243112

Luminaire Tested: **S122DR-H675D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243112  
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-H675D927-X4F0-XX-UDD-F-W  
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2042.1 lumens  
Efficiency: N/A  
Efficacy: 86.5 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

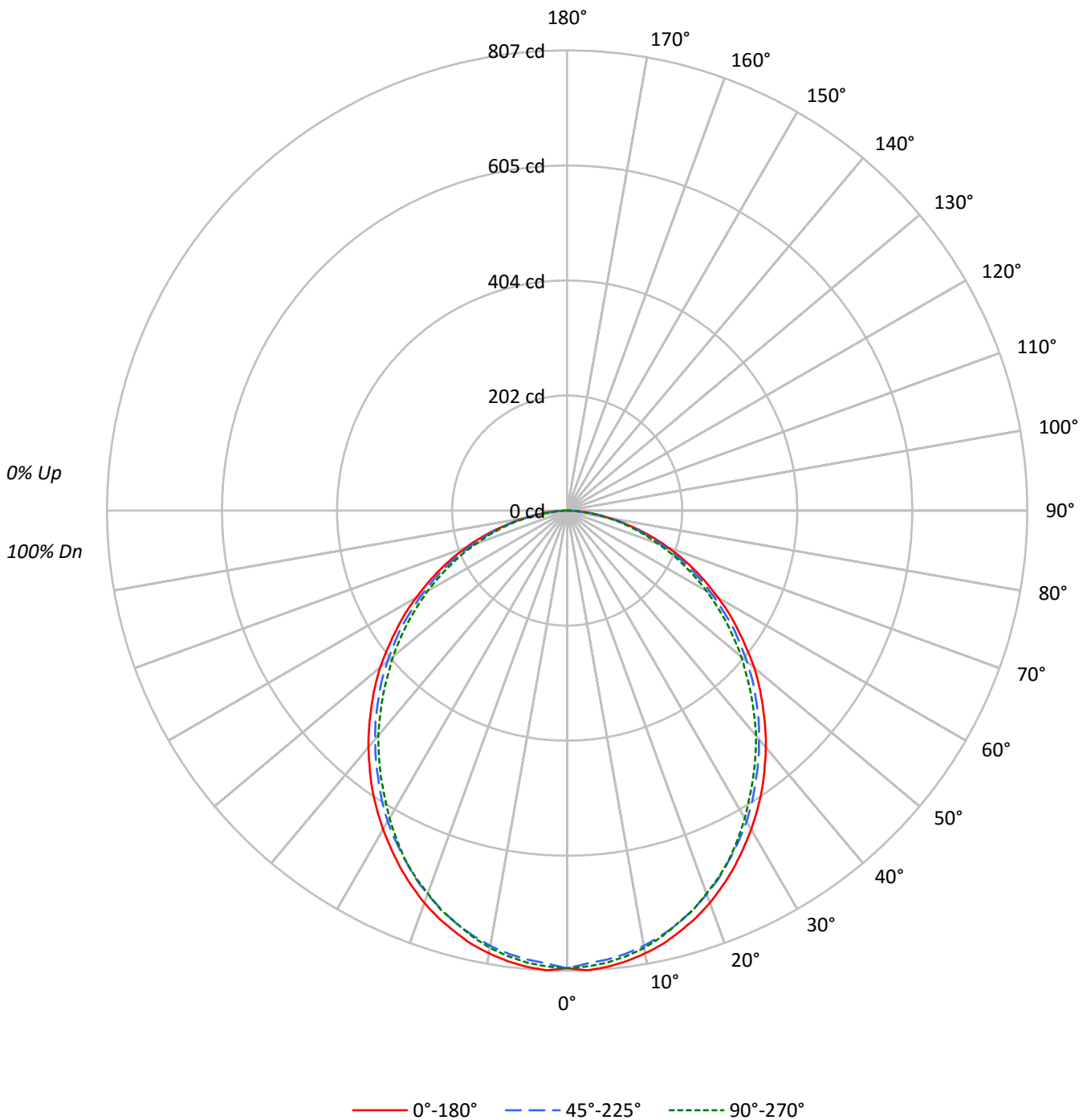
Input Watts (W): 23.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	15286	15286	15286
5°	15359	15119	15218
10°	15251	14992	15063
15°	15068	14790	14776
20°	14842	14513	14483
25°	14535	14178	14161
30°	14202	13843	13698
35°	13863	13415	13243
40°	13482	13022	12818
45°	13070	12612	12294
50°	12692	12185	11815
55°	12158	11743	11298
60°	11638	11185	10762
65°	11132	10601	10136
70°	10464	9930	9434
75°	9523	9148	8706
80°	8271	8029	7711
85°	7103	6294	5813



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.6	3.7
10°-20°	212.7	10.4
20°-30°	312.7	15.3
30°-40°	363.1	17.8
40°-50°	362.6	17.8
50°-60°	315.8	15.5
60°-70°	233.6	11.4
70°-80°	131.7	6.4
80°-90°	34.3	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°	601.0	29.4
0°-40°	964.1	47.2
0°-60°	1642.5	80.4
0°-90°	2042.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2042.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	802	802	802	802	802	
5°	803	800	791	797	796	76
15°	764	760	750	753	749	215
25°	692	686	675	674	674	318
35°	596	590	577	572	570	373
45°	485	480	468	461	456	375
55°	366	363	354	344	340	328
65°	247	243	235	228	225	244
75°	129	129	124	120	118	138
85°	32	31	29	27	27	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	802.5	802.5	802.5	802.5	802.5
2.5°	807.0	803.3	795.1	801.8	800.3
5°	803.3	799.6	790.7	797.3	795.9
7.5°	797.3	793.6	784.0	790.7	788.5
10°	788.5	784.0	775.1	779.6	778.8
12.5°	778.1	773.7	763.3	767.0	765.5
15°	764.1	760.4	750.0	753.0	749.3
17.5°	749.3	743.3	733.7	736.7	734.5
20°	732.2	726.3	716.0	717.5	714.5
22.5°	712.3	706.4	696.7	696.7	695.3
25°	691.6	685.7	674.6	673.8	673.8
27.5°	668.6	663.5	652.4	650.1	648.7
30°	645.7	641.3	629.4	625.0	622.8
32.5°	621.3	615.4	604.3	599.1	595.4
35°	596.2	589.5	576.9	571.7	569.5
37.5°	568.8	562.1	551.0	546.6	542.2
40°	542.2	536.2	523.7	517.0	515.5
42.5°	514.1	508.1	497.0	489.6	485.2
45°	485.2	480.0	468.2	460.8	456.4
47.5°	457.1	451.2	440.8	432.0	426.0
50°	428.3	422.3	411.2	400.9	398.7
52.5°	396.4	392.8	381.7	372.0	369.1
55°	366.1	363.2	353.6	343.9	340.2
57.5°	337.3	333.6	322.5	315.1	310.7
60°	305.5	303.3	293.6	285.5	282.5
62.5°	275.9	272.9	264.8	256.7	253.0
65°	247.0	243.3	235.2	227.8	224.9
67.5°	217.5	213.8	207.1	201.2	198.2
70°	187.9	184.9	178.3	173.1	169.4
72.5°	159.0	156.1	150.1	145.0	144.2
75°	129.4	128.7	124.3	119.8	118.3
77.5°	102.1	101.3	98.4	96.2	94.7
80°	75.4	75.4	73.2	71.0	70.3
82.5°	51.8	52.5	50.3	48.8	48.8
85°	32.5	31.1	28.8	27.4	26.6
87.5°	13.3	11.1	10.4	8.1	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)