

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: P242374

Luminaire Tested: **S122RDR-S675D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242374  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S675D930-X4F0-XX-UDD-F-W  
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1852.8 lumens  
Efficiency: N/A  
Efficacy: 70.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')  
CIE Type: Direct

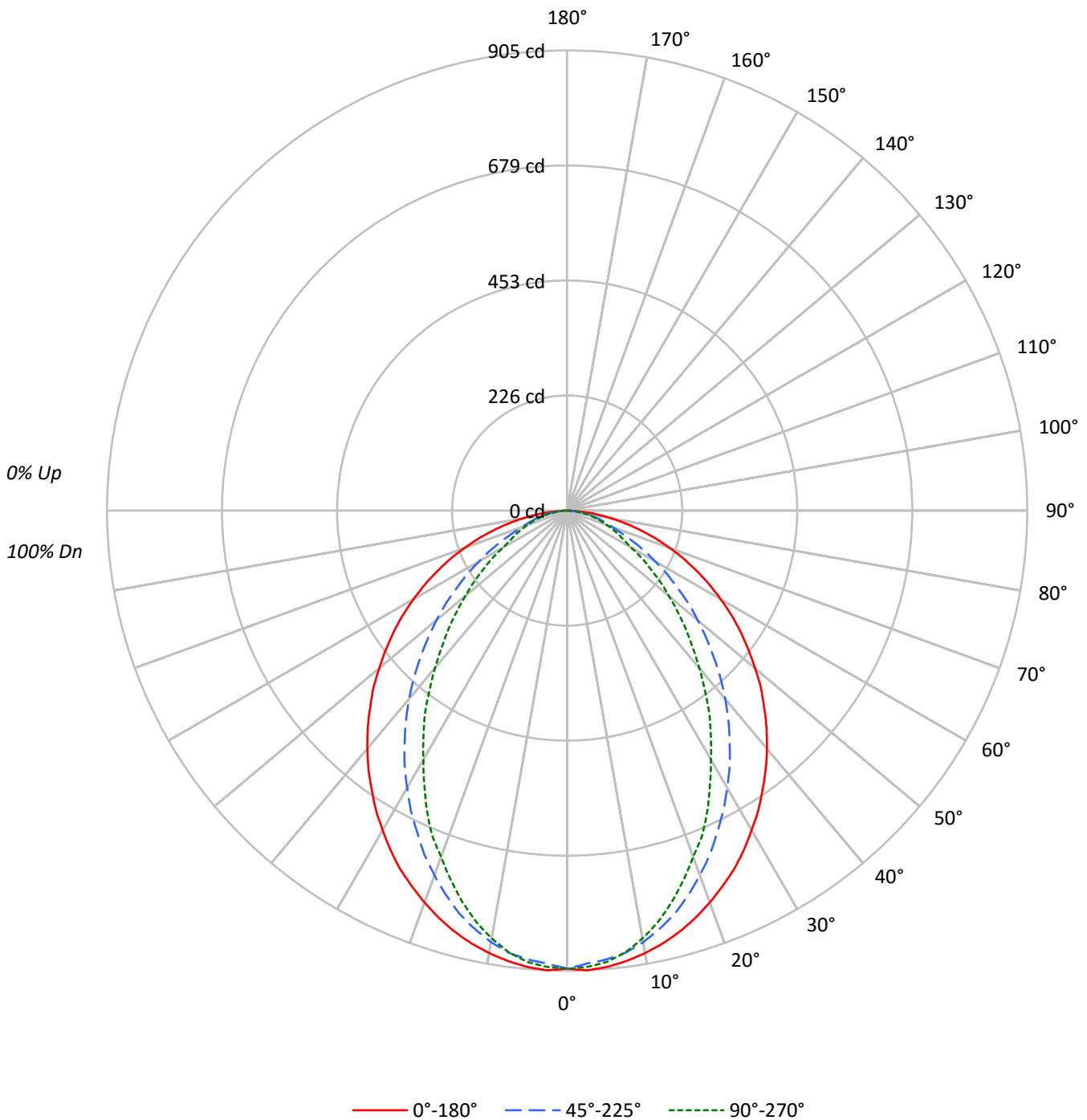
Input Watts (W): 26.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	17160	17160	17160
5°	17226	16945	17038
10°	17094	16669	16525
15°	16898	16174	15707
20°	16626	15468	14692
25°	16347	14668	13707
30°	15959	13843	12444
35°	15584	12947	11336
40°	15205	12022	10055
45°	14759	10980	8895
50°	14304	9930	7755
55°	13835	8800	6662
60°	13291	7608	5528
65°	12678	6396	5034
70°	11940	5268	4634
75°	11039	4798	4320
80°	9752	4289	3938
85°	7671	3387	3387



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.4	4.6
10°-20°	231.8	12.5
20°-30°	325.4	17.6
30°-40°	354.7	19.1
40°-50°	326.0	17.6
50°-60°	256.0	13.8
60°-70°	166.7	9.0
70°-80°	85.8	4.6
80°-90°	21.9	1.2
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°	641.6	34.6
0°-40°	996.4	53.8
0°-60°	1578.5	85.2
0°-90°	1852.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1852.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	901	901	901	901	901	
5°	901	897	886	894	891	85
15°	857	848	820	805	796	241
25°	778	752	698	664	652	358
35°	670	629	557	506	488	419
45°	548	493	408	350	330	423
55°	417	353	265	216	201	372
65°	281	215	142	114	112	279
75°	150	93	65	60	59	159
85°	35	18	16	16	16	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	900.9	900.9	900.9	900.9	900.9
2.5°	905.0	900.9	891.9	900.1	898.5
5°	900.9	896.8	886.2	893.6	891.1
7.5°	893.6	888.7	877.3	880.5	876.4
10°	883.8	878.1	861.8	859.3	854.4
12.5°	871.6	864.2	842.2	837.3	828.3
15°	856.9	847.9	820.2	804.7	796.5
17.5°	839.8	826.7	792.5	774.5	761.5
20°	820.2	803.9	763.1	742.7	724.8
22.5°	799.0	780.2	733.0	705.2	693.0
25°	777.8	751.7	697.9	664.5	652.2
27.5°	752.5	724.8	665.3	627.0	608.2
30°	725.6	694.6	629.4	587.8	565.8
32.5°	699.5	662.0	595.2	546.2	525.9
35°	670.2	628.6	556.8	505.5	487.5
37.5°	641.6	596.8	521.0	464.7	444.3
40°	611.5	562.6	483.5	425.6	404.4
42.5°	580.5	528.3	446.0	385.6	365.3
45°	547.9	493.3	407.6	349.8	330.2
47.5°	516.9	459.0	371.0	313.1	295.1
50°	482.7	424.8	335.1	278.8	261.7
52.5°	449.2	388.1	300.8	247.0	231.5
55°	416.6	353.0	265.0	216.1	200.6
57.5°	383.2	318.0	233.2	187.5	174.5
60°	348.9	283.7	199.7	158.2	145.1
62.5°	315.5	250.3	171.2	132.1	125.6
65°	281.3	215.2	141.9	114.1	111.7
67.5°	248.7	182.6	114.1	100.3	97.8
70°	214.4	150.8	94.6	86.4	83.2
72.5°	181.8	121.5	79.1	72.6	70.9
75°	150.0	92.9	65.2	59.5	58.7
77.5°	118.2	66.0	51.4	48.1	46.5
80°	88.9	47.3	39.1	35.9	35.9
82.5°	62.0	31.8	26.9	25.3	25.3
85°	35.1	17.9	15.5	15.5	15.5
87.5°	13.0	6.5	6.5	5.7	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)