

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: P243114

Luminaire Tested: **S122DR-H1005D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243114  
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-H1005D927-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**

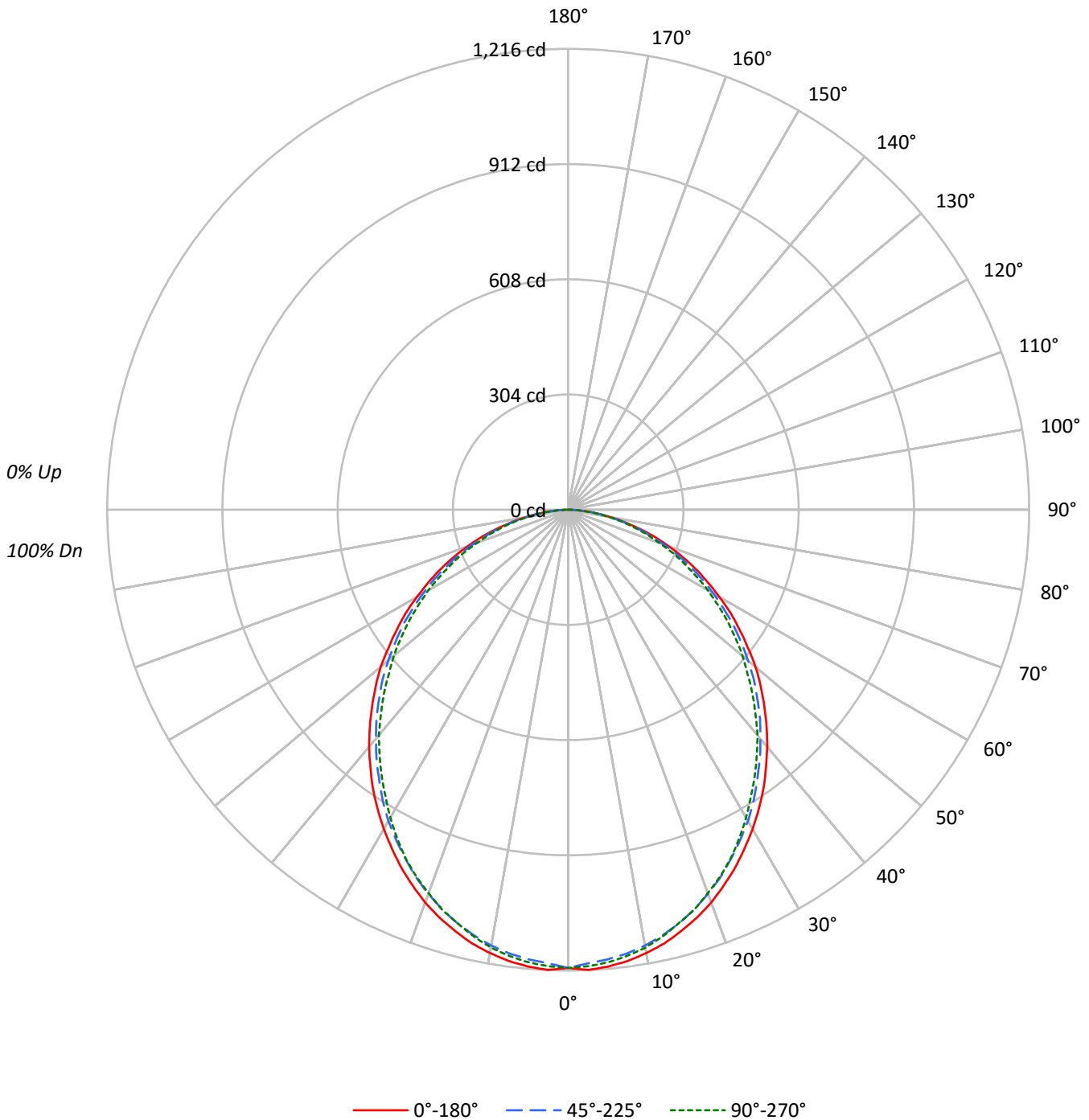
Lumens per Lamp: N/A  
Luminaire Lumens: 3076.5 lumens  
Efficiency: N/A  
Efficacy: 81.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29  
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.7  
Input Voltage (V): 120  
Input Current (A<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°	23029	23029	23029
5°	23138	22776	22925
10°	22974	22587	22695
15°	22699	22281	22260
20°	22362	21863	21819
25°	21897	21357	21334
30°	21396	20857	20635
35°	20883	20211	19951
40°	20310	19616	19313
45°	19691	19002	18520
50°	19119	18358	17798
55°	18318	17687	17023
60°	17532	16853	16217
65°	16775	15969	15265
70°	15761	14953	14213
75°	14351	13777	13122
80°	12472	12099	11616
85°	10709	9507	8764



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.8	3.7
10°-20°	320.4	10.4
20°-30°	471.1	15.3
30°-40°	547.0	17.8
40°-50°	546.3	17.8
50°-60°	475.8	15.5
60°-70°	351.9	11.4
70°-80°	198.4	6.4
80°-90°	51.7	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°	905.4	29.4
0°-40°	1452.4	47.2
0°-60°	2474.5	80.4
0°-90°	3076.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3076.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1209	1209	1209	1209	1209	
5°	1210	1205	1191	1201	1199	115
15°	1151	1146	1130	1134	1129	325
25°	1042	1033	1016	1015	1015	480
35°	898	888	869	861	858	561
45°	731	723	705	694	688	565
55°	552	547	533	518	513	494
65°	372	367	354	343	339	368
75°	195	194	187	180	178	207
85°	49	47	44	41	40	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1209.0	1209.0	1209.0	1209.0	1209.0
2.5°	1215.7	1210.1	1197.9	1207.9	1205.7
5°	1210.1	1204.6	1191.2	1201.2	1199.0
7.5°	1201.2	1195.6	1181.2	1191.2	1187.8
10°	1187.8	1181.2	1167.8	1174.5	1173.4
12.5°	1172.2	1165.6	1150.0	1155.5	1153.3
15°	1151.1	1145.5	1129.9	1134.4	1128.8
17.5°	1128.8	1119.9	1105.4	1109.8	1106.5
20°	1103.2	1094.2	1078.6	1080.9	1076.4
22.5°	1073.1	1064.2	1049.7	1049.7	1047.4
25°	1041.9	1033.0	1016.2	1015.1	1015.1
27.5°	1007.3	999.5	982.8	979.5	977.2
30°	972.8	966.1	948.3	941.6	938.2
32.5°	936.0	927.1	910.4	902.6	897.0
35°	898.1	888.1	869.2	861.4	858.0
37.5°	856.9	846.9	830.2	823.5	816.8
40°	816.8	807.9	788.9	778.9	776.7
42.5°	774.4	765.5	748.8	737.7	731.0
45°	731.0	723.2	705.4	694.2	687.5
47.5°	688.6	679.7	664.1	650.8	641.8
50°	645.2	636.3	619.5	603.9	600.6
52.5°	597.3	591.7	575.0	560.5	556.0
55°	551.6	547.1	532.6	518.1	512.6
57.5°	508.1	502.5	485.8	474.7	468.0
60°	460.2	456.9	442.4	430.1	425.7
62.5°	415.6	411.2	398.9	386.7	381.1
65°	372.2	366.6	354.3	343.2	338.7
67.5°	327.6	322.0	312.0	303.1	298.6
70°	283.0	278.6	268.5	260.7	255.2
72.5°	239.6	235.1	226.2	218.4	217.3
75°	195.0	193.9	187.2	180.5	178.3
77.5°	153.8	152.7	148.2	144.9	142.6
80°	113.7	113.7	110.3	107.0	105.9
82.5°	78.0	79.1	75.8	73.5	73.5
85°	49.0	46.8	43.5	41.2	40.1
87.5°	20.1	16.7	15.6	12.3	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)