

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: P243222

Luminaire Tested: **S122RDR-H1005D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243222  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-63)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122RDR-H1005D830-X4F0-XX-UDD-F-W  
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3151.3 lumens  
Efficiency: N/A  
Efficacy: 83.6 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

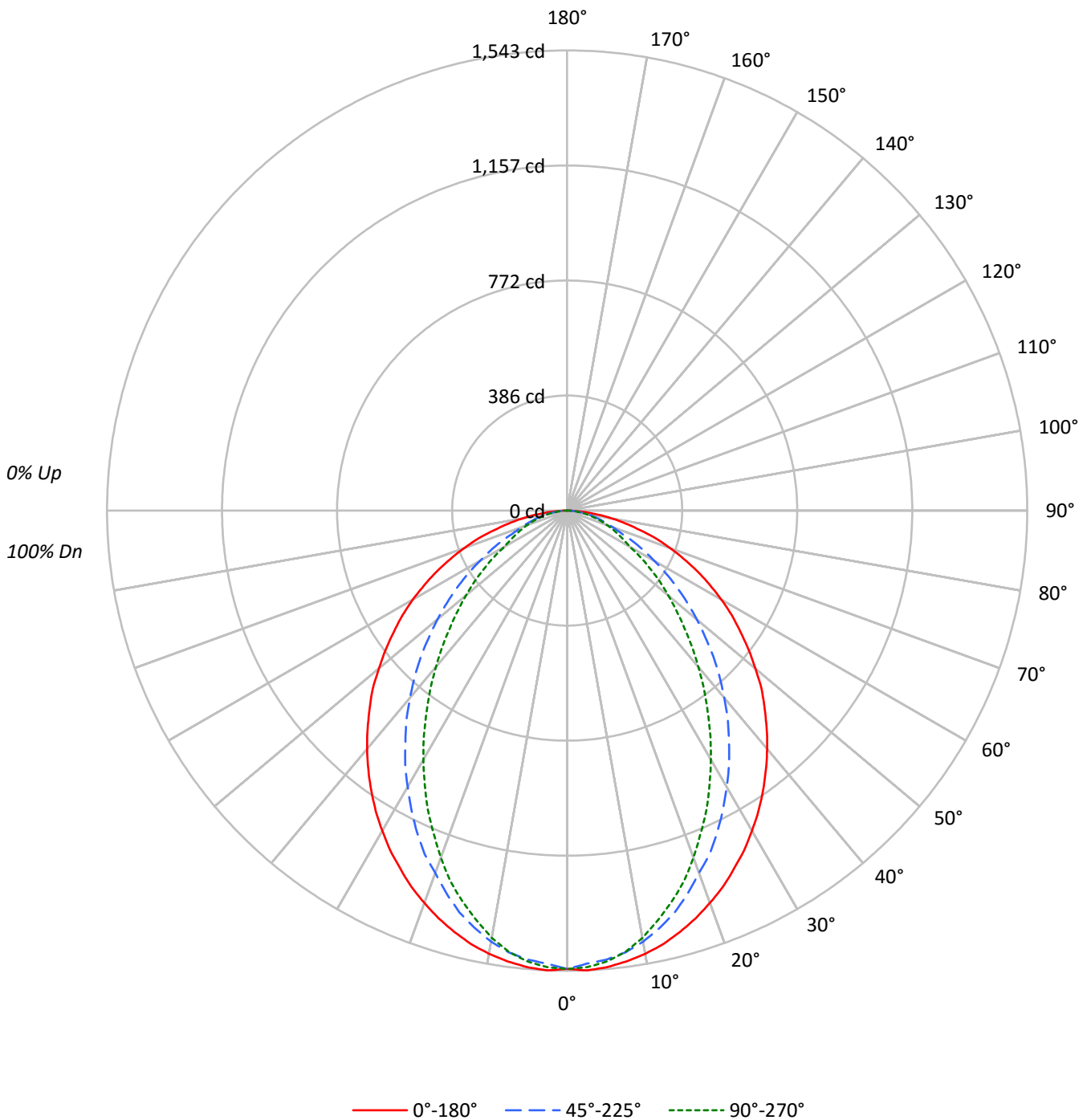
Input Watts (W): 37.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	77	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°	29269	29269	29269
5°	29381	28899	29025
10°	29183	28388	28130
15°	28838	27503	26746
20°	28378	26203	25101
25°	27837	25023	23238
30°	27264	23532	21200
35°	26636	21981	19084
40°	25944	20372	17010
45°	25214	18678	14964
50°	24397	16814	13121
55°	23555	14970	11314
60°	22777	12880	9242
65°	21751	10876	8545
70°	20450	9005	7975
75°	18634	8198	7315
80°	16728	7273	6549
85°	13900	6076	5792



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.9	4.6
10°-20°	394.4	12.5
20°-30°	553.3	17.6
30°-40°	602.7	19.1
40°-50°	554.0	17.6
50°-60°	434.7	13.8
60°-70°	283.6	9.0
70°-80°	146.7	4.7
80°-90°	38.0	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°	1091.7	34.6
0°-40°	1694.4	53.8
0°-60°	2683.1	85.1
0°-90°	3151.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3151.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1537	1537	1537	1537	1537	
5°	1537	1529	1511	1522	1518	146
15°	1462	1445	1395	1367	1356	412
25°	1324	1278	1191	1132	1106	610
35°	1146	1070	945	858	821	716
45°	936	841	693	593	556	723
55°	709	603	451	366	341	636
65°	483	366	241	196	190	477
75°	253	158	111	102	99	271
85°	64	30	28	26	26	73
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1536.6	1536.6	1536.6	1536.6	1536.6
2.5°	1543.2	1536.6	1520.7	1535.3	1532.6
5°	1536.6	1528.6	1511.4	1522.0	1518.0
7.5°	1524.7	1516.7	1494.2	1499.5	1492.8
10°	1508.8	1498.1	1467.7	1462.4	1454.4
12.5°	1488.9	1474.3	1433.2	1417.3	1406.7
15°	1462.4	1445.1	1394.7	1366.9	1356.3
17.5°	1433.2	1408.0	1345.7	1313.9	1303.3
20°	1400.0	1370.9	1292.7	1259.5	1238.3
22.5°	1365.6	1328.4	1247.6	1195.9	1170.7
25°	1324.5	1278.1	1190.6	1132.2	1105.7
27.5°	1284.7	1230.3	1130.9	1063.3	1034.1
30°	1239.6	1180.0	1069.9	991.7	963.9
32.5°	1194.5	1125.6	1010.3	925.4	893.6
35°	1145.5	1069.9	945.3	857.8	820.7
37.5°	1095.1	1016.9	885.6	788.8	753.1
40°	1043.4	955.9	819.3	718.6	684.1
42.5°	990.4	901.5	757.0	653.6	620.5
45°	936.0	840.6	693.4	592.6	555.5
47.5°	884.3	780.9	628.4	533.0	497.2
50°	823.3	721.2	567.4	470.7	442.8
52.5°	767.6	661.6	507.8	415.0	391.1
55°	709.3	603.2	450.8	365.9	340.7
57.5°	654.9	542.3	393.8	316.9	293.0
60°	597.9	483.9	338.1	267.8	242.6
62.5°	538.3	424.3	289.0	222.7	214.8
65°	482.6	365.9	241.3	196.2	189.6
67.5°	422.9	311.6	192.2	172.4	165.7
70°	367.2	258.5	161.7	147.2	143.2
72.5°	312.9	208.1	136.6	124.6	120.6
75°	253.2	157.8	111.4	102.1	99.4
77.5°	201.5	111.4	88.8	82.2	79.5
80°	152.5	80.9	66.3	62.3	59.7
82.5°	104.7	54.4	46.4	43.8	42.4
85°	63.6	30.5	27.8	26.5	26.5
87.5°	25.2	11.9	11.9	10.6	10.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)