

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: P243236

Luminaire Tested: **S122RDR-H1005D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243236  
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-H1005D930-X4F0-XX-UDD-F-W  
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2725.9 lumens  
Efficiency: N/A  
Efficacy: 72.3 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

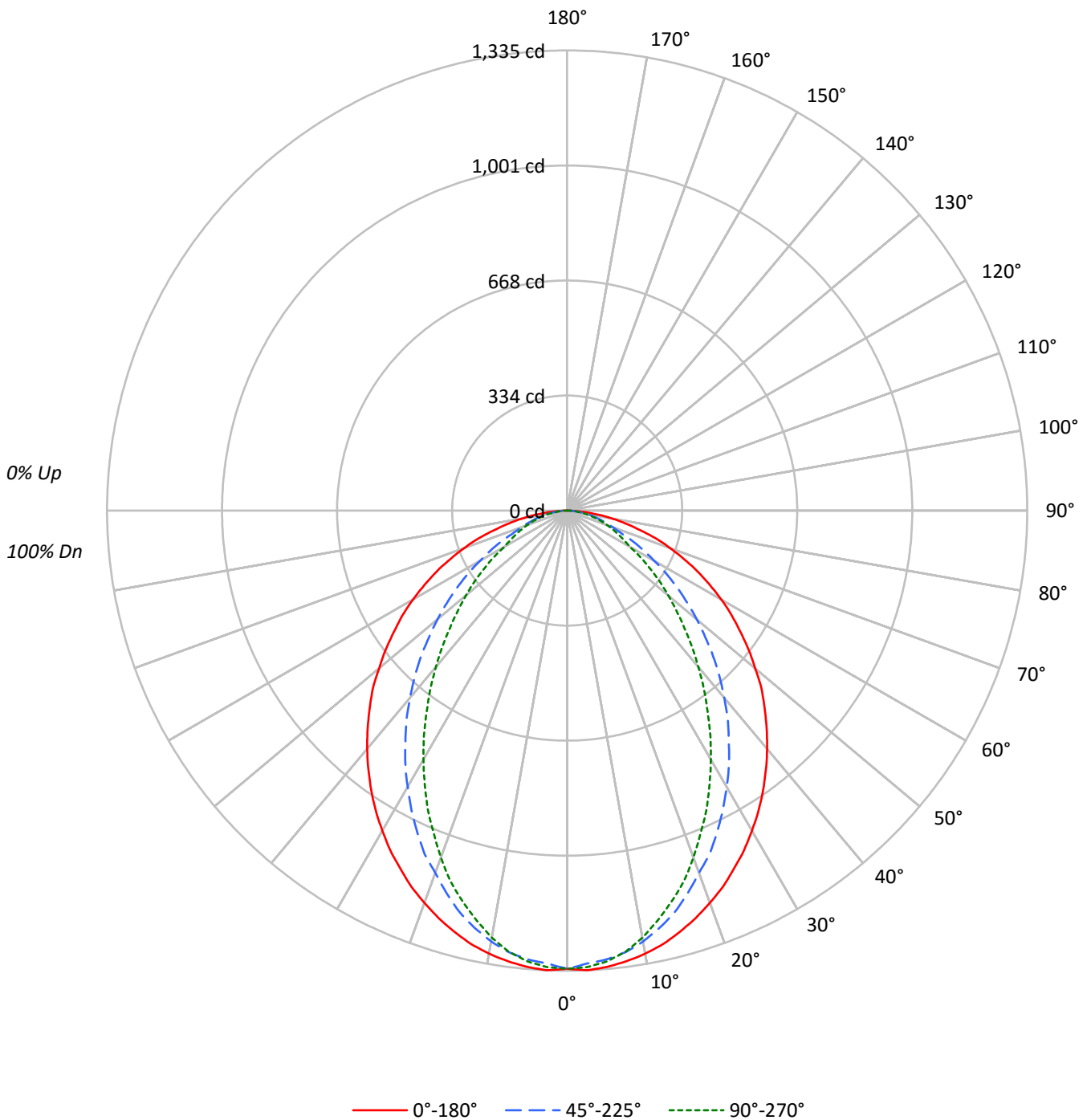
Input Watts (W): 37.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
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°	25318	25318	25318
5°	25415	24998	25107
10°	25243	24554	24334
15°	24943	23790	23135
20°	24547	22664	21711
25°	24079	21643	20100
30°	23585	20356	18337
35°	23039	19014	16507
40°	22441	17622	14715
45°	21811	16157	12943
50°	21105	14544	11349
55°	20374	12948	9787
60°	19703	11139	7996
65°	18813	9406	7392
70°	17693	7791	6900
75°	16117	7087	6329
80°	14468	6285	5660
85°	12020	5267	5005



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.5	4.6
10°-20°	341.2	12.5
20°-30°	478.6	17.6
30°-40°	521.3	19.1
40°-50°	479.2	17.6
50°-60°	376.0	13.8
60°-70°	245.3	9.0
70°-80°	126.9	4.7
80°-90°	32.8	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°	944.3	34.6
0°-40°	1465.6	53.8
0°-60°	2320.9	85.1
0°-90°	2725.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2725.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1329	1329	1329	1329	1329	
5°	1329	1322	1307	1316	1313	126
15°	1265	1250	1206	1182	1173	357
25°	1146	1106	1030	979	956	528
35°	991	926	818	742	710	620
45°	810	727	600	513	480	625
55°	614	522	390	316	295	550
65°	417	316	209	170	164	412
75°	219	136	96	88	86	234
85°	55	26	24	23	23	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1329.2	1329.2	1329.2	1329.2	1329.2
2.5°	1334.9	1329.2	1315.4	1328.0	1325.7
5°	1329.2	1322.3	1307.4	1316.5	1313.1
7.5°	1318.8	1312.0	1292.5	1297.0	1291.3
10°	1305.1	1295.9	1269.5	1264.9	1258.1
12.5°	1287.9	1275.3	1239.7	1225.9	1216.8
15°	1264.9	1250.0	1206.4	1182.4	1173.2
17.5°	1239.7	1217.9	1164.0	1136.5	1127.3
20°	1211.0	1185.8	1118.1	1089.5	1071.1
22.5°	1181.2	1149.1	1079.2	1034.4	1012.6
25°	1145.7	1105.5	1029.8	979.4	956.4
27.5°	1111.3	1064.2	978.2	919.7	894.5
30°	1072.3	1020.7	925.5	857.8	833.7
32.5°	1033.3	973.6	873.9	800.5	773.0
35°	990.8	925.5	817.7	742.0	709.9
37.5°	947.3	879.6	766.1	682.4	651.4
40°	902.5	826.9	708.7	621.6	591.8
42.5°	856.7	779.8	654.8	565.4	536.7
45°	809.7	727.1	599.8	512.6	480.5
47.5°	764.9	675.5	543.6	461.0	430.1
50°	712.2	623.9	490.8	407.1	383.0
52.5°	664.0	572.3	439.2	359.0	338.3
55°	613.5	521.8	389.9	316.5	294.7
57.5°	566.5	469.0	340.6	274.1	253.4
60°	517.2	418.6	292.4	231.7	209.9
62.5°	465.6	367.0	250.0	192.7	185.8
65°	417.4	316.5	208.7	169.7	164.0
67.5°	365.8	269.5	166.3	149.1	143.4
70°	317.7	223.6	139.9	127.3	123.9
72.5°	270.6	180.0	118.1	107.8	104.4
75°	219.0	136.5	96.3	88.3	86.0
77.5°	174.3	96.3	76.8	71.1	68.8
80°	131.9	70.0	57.3	53.9	51.6
82.5°	90.6	47.0	40.1	37.8	36.7
85°	55.0	26.4	24.1	22.9	22.9
87.5°	21.8	10.3	10.3	9.2	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)