

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: P243217

Luminaire Tested: **S122RDR-H1005D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243217  
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-H1005D927-X4F0-XX-UDD-F-W  
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

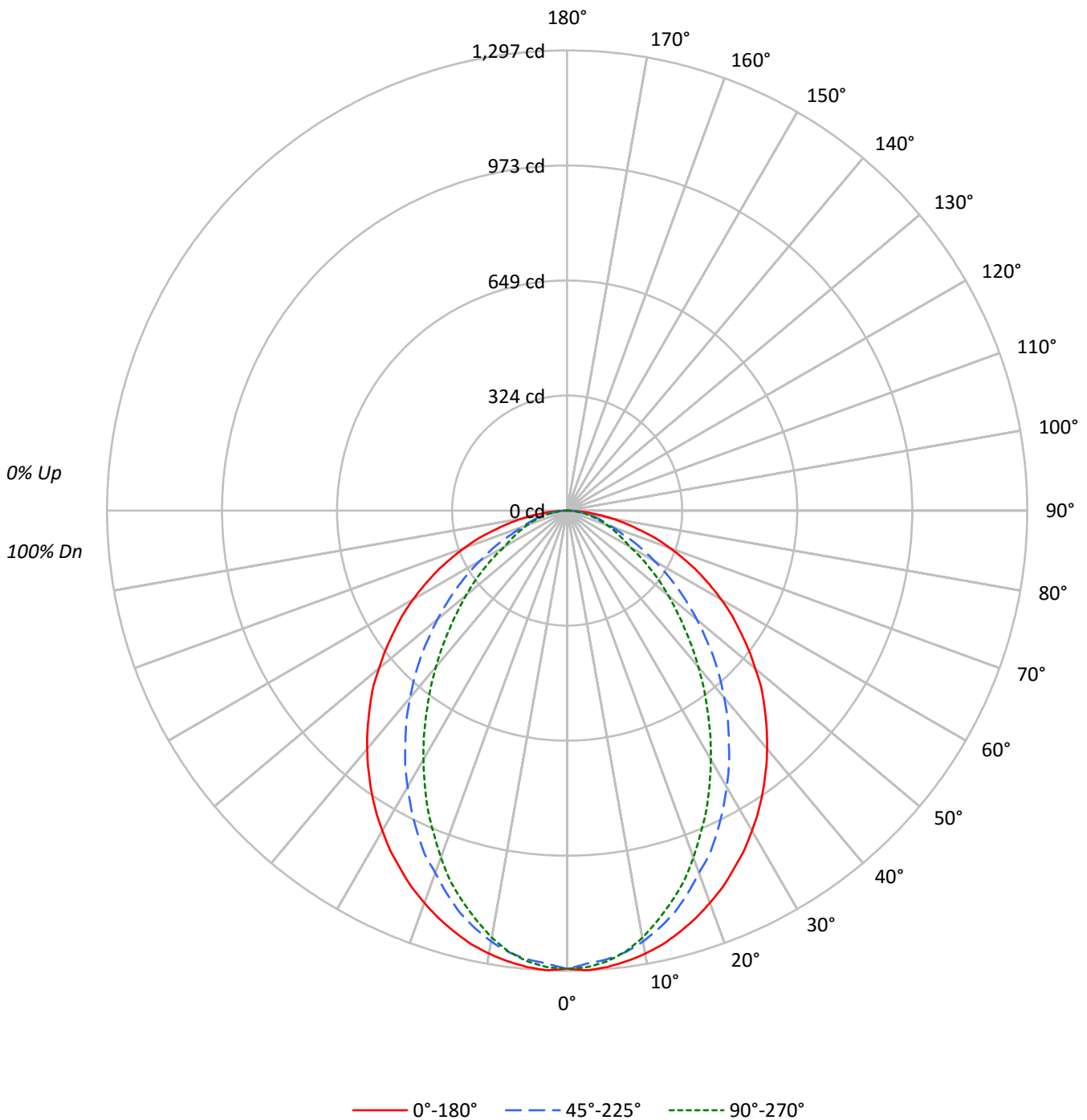
Lumens per Lamp: N/A  
Luminaire Lumens: 2648.6 lumens  
Efficiency: N/A  
Efficacy: 70.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.7  
Input Voltage (V): 120  
Input Current (A<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	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°	24600	24600	24600
5°	24694	24289	24396
10°	24527	23858	23643
15°	24237	23115	22478
20°	23852	22021	21097
25°	23396	21029	19531
30°	22916	19777	17818
35°	22388	18474	16038
40°	21807	17122	14297
45°	21192	15699	12577
50°	20506	14132	11029
55°	19796	12583	9511
60°	19143	10823	7768
65°	18281	9140	7180
70°	17192	7569	6700
75°	15661	6888	6153
80°	14051	6110	5496
85°	11692	5114	4874



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.0	4.6
10°-20°	331.5	12.5
20°-30°	465.1	17.6
30°-40°	506.6	19.1
40°-50°	465.6	17.6
50°-60°	365.4	13.8
60°-70°	238.4	9.0
70°-80°	123.3	4.7
80°-90°	31.9	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°	917.5	34.6
0°-40°	1424.1	53.8
0°-60°	2255.1	85.1
0°-90°	2648.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2648.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1292	1292	1292	1292	1292	
5°	1292	1285	1270	1279	1276	122
15°	1229	1215	1172	1149	1140	346
25°	1113	1074	1001	952	929	513
35°	963	899	794	721	690	602
45°	787	706	583	498	467	607
55°	596	507	379	308	286	534
65°	406	308	203	165	159	401
75°	213	133	94	86	84	228
85°	54	26	23	22	22	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1291.5	1291.5	1291.5	1291.5	1291.5
2.5°	1297.0	1291.5	1278.1	1290.4	1288.1
5°	1291.5	1284.8	1270.3	1279.2	1275.9
7.5°	1281.4	1274.8	1255.8	1260.3	1254.7
10°	1268.1	1259.2	1233.5	1229.1	1222.4
12.5°	1251.4	1239.1	1204.6	1191.2	1182.3
15°	1229.1	1214.6	1172.2	1148.8	1139.9
17.5°	1204.6	1183.4	1131.0	1104.3	1095.4
20°	1176.7	1152.2	1086.4	1058.6	1040.8
22.5°	1147.7	1116.5	1048.6	1005.1	983.9
25°	1113.2	1074.2	1000.6	951.6	929.3
27.5°	1079.8	1034.1	950.5	893.7	869.2
30°	1041.9	991.7	899.2	833.5	810.1
32.5°	1004.0	946.0	849.1	777.8	751.0
35°	962.8	899.2	794.5	720.9	689.7
37.5°	920.4	854.7	744.4	663.0	632.9
40°	877.0	803.4	688.6	603.9	575.0
42.5°	832.4	757.7	636.3	549.3	521.5
45°	786.7	706.5	582.8	498.1	466.9
47.5°	743.2	656.3	528.2	447.9	417.9
50°	692.0	606.2	476.9	395.6	372.2
52.5°	645.2	556.0	426.8	348.8	328.7
55°	596.1	507.0	378.9	307.5	286.4
57.5°	550.5	455.7	330.9	266.3	246.3
60°	502.5	406.7	284.1	225.1	203.9
62.5°	452.4	356.6	242.9	187.2	180.5
65°	405.6	307.5	202.8	164.9	159.3
67.5°	355.5	261.9	161.6	144.9	139.3
70°	308.7	217.3	135.9	123.7	120.3
72.5°	263.0	174.9	114.8	104.7	101.4
75°	212.8	132.6	93.6	85.8	83.6
77.5°	169.4	93.6	74.7	69.1	66.9
80°	128.1	68.0	55.7	52.4	50.1
82.5°	88.0	45.7	39.0	36.8	35.7
85°	53.5	25.6	23.4	22.3	22.3
87.5°	21.2	10.0	10.0	8.9	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)