

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: P242357

Luminaire Tested: **S122RDR-S1005D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242357  
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-S1005D927-X4F0-XX-UDD-F-W  
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2668.2 lumens  
Efficiency: N/A  
Efficacy: 64.9 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

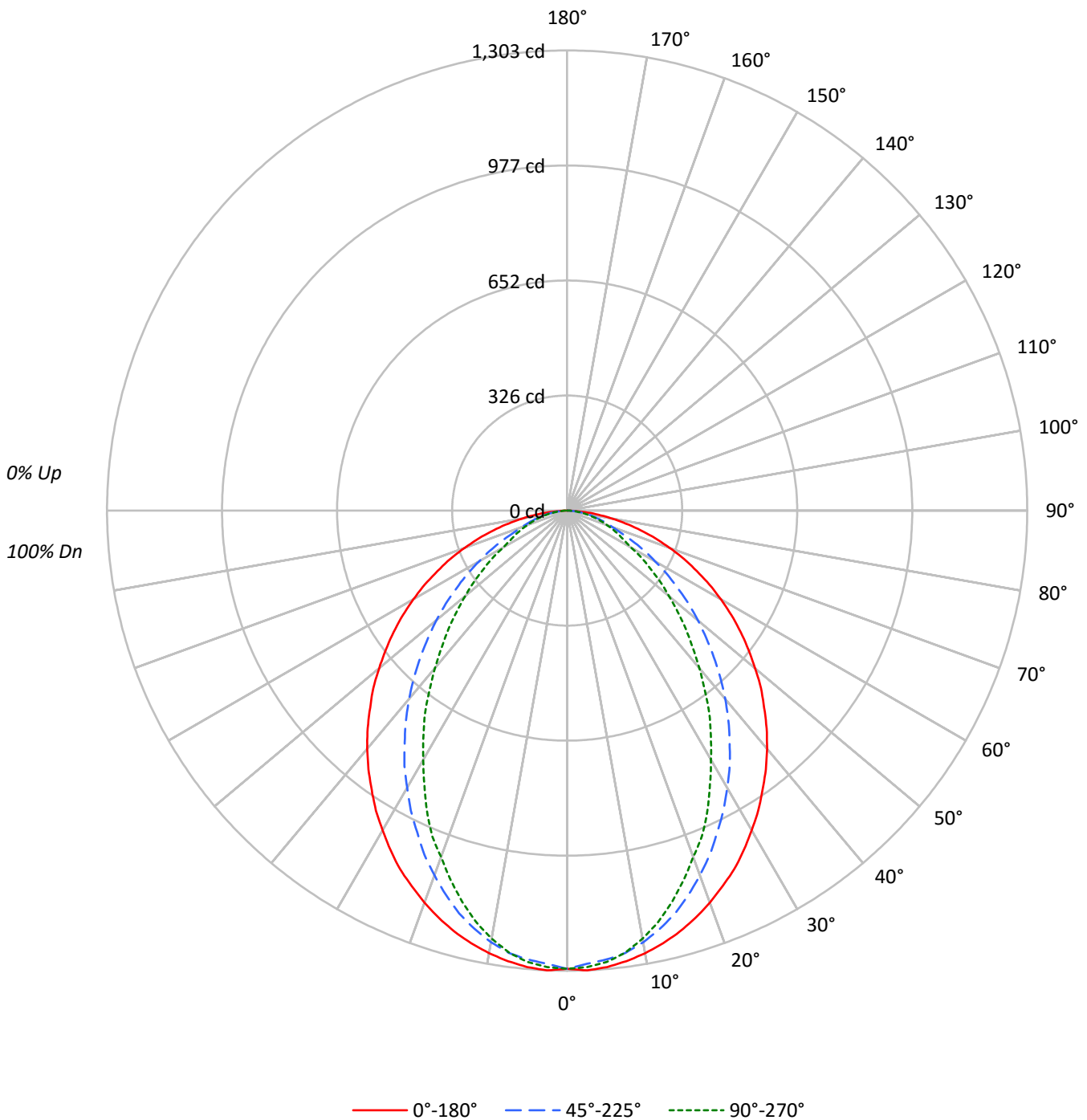
Input Watts (W): 41.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	24712	24712	24712
5°	24807	24402	24537
10°	24616	24003	23798
15°	24334	23291	22620
20°	23941	22275	21158
25°	23541	21122	19741
30°	22982	19936	17921
35°	22441	18647	16326
40°	21896	17311	14479
45°	21254	15812	12809
50°	20598	14298	11169
55°	19925	12672	9591
60°	19143	10956	7962
65°	18258	9208	7247
70°	17198	7585	6672
75°	15896	6911	6219
80°	14040	6187	5671
85°	11037	4874	4874



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.6	4.6
10°-20°	333.8	12.5
20°-30°	468.6	17.6
30°-40°	510.8	19.1
40°-50°	469.5	17.6
50°-60°	368.7	13.8
60°-70°	240.0	9.0
70°-80°	123.6	4.6
80°-90°	31.6	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°	924.0	34.6
0°-40°	1434.8	53.8
0°-60°	2273.1	85.2
0°-90°	2668.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2668.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1297	1297	1297	1297	1297	
5°	1297	1292	1276	1287	1283	123
15°	1234	1221	1181	1159	1147	348
25°	1120	1082	1005	957	939	515
35°	965	905	802	728	702	604
45°	789	710	587	504	476	609
55°	600	508	382	311	289	536
65°	405	310	204	164	161	402
75°	216	134	94	86	84	228
85°	50	26	22	22	22	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1297.4	1297.4	1297.4	1297.4	1297.4
2.5°	1303.2	1297.4	1284.4	1296.2	1293.8
5°	1297.4	1291.5	1276.2	1286.8	1283.3
7.5°	1286.8	1279.7	1263.3	1268.0	1262.1
10°	1272.7	1264.5	1241.0	1237.5	1230.4
12.5°	1255.1	1244.5	1212.8	1205.8	1192.9
15°	1234.0	1221.0	1181.1	1158.8	1147.1
17.5°	1209.3	1190.5	1141.2	1115.4	1096.6
20°	1181.1	1157.6	1098.9	1069.6	1043.8
22.5°	1150.6	1123.6	1055.5	1015.6	998.0
25°	1120.1	1082.5	1005.0	956.9	939.3
27.5°	1083.7	1043.8	958.0	902.9	875.9
30°	1044.9	1000.3	906.4	846.5	814.8
32.5°	1007.4	953.3	857.1	786.6	757.3
35°	965.1	905.2	801.9	727.9	702.1
37.5°	924.0	859.4	750.2	669.2	639.9
40°	880.6	810.1	696.2	612.9	582.3
42.5°	835.9	760.8	642.2	555.3	526.0
45°	789.0	710.3	587.0	503.7	475.5
47.5°	744.4	661.0	534.2	450.8	425.0
50°	695.1	611.7	482.5	401.5	376.9
52.5°	646.9	558.9	433.2	355.7	333.4
55°	600.0	508.4	381.6	311.1	288.8
57.5°	551.8	457.9	335.8	270.0	251.3
60°	502.5	408.6	287.6	227.8	209.0
62.5°	454.4	360.4	246.6	190.2	180.8
65°	405.1	310.0	204.3	164.4	160.8
67.5°	358.1	263.0	164.4	144.4	140.9
70°	308.8	217.2	136.2	124.5	119.8
72.5°	261.8	174.9	113.9	104.5	102.1
75°	216.0	133.8	93.9	85.7	84.5
77.5°	170.2	95.1	74.0	69.3	66.9
80°	128.0	68.1	56.4	51.7	51.7
82.5°	89.2	45.8	38.7	36.4	36.4
85°	50.5	25.8	22.3	22.3	22.3
87.5°	18.8	9.4	9.4	8.2	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)