

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: P243045

Luminaire Tested: **S121RDR-H1025D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243045
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-62)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121RDR-H1025D927-X4F0-XX-UDD-F-W
Description: DEFINE 1 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: 2445.3 lumens
Efficiency: N/A
Efficacy: 64.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 0.92 / 1.09
Luminous Opening: Rectangular (W 0.09' x L: 3.88' x H: 0')
CIE Type: Direct

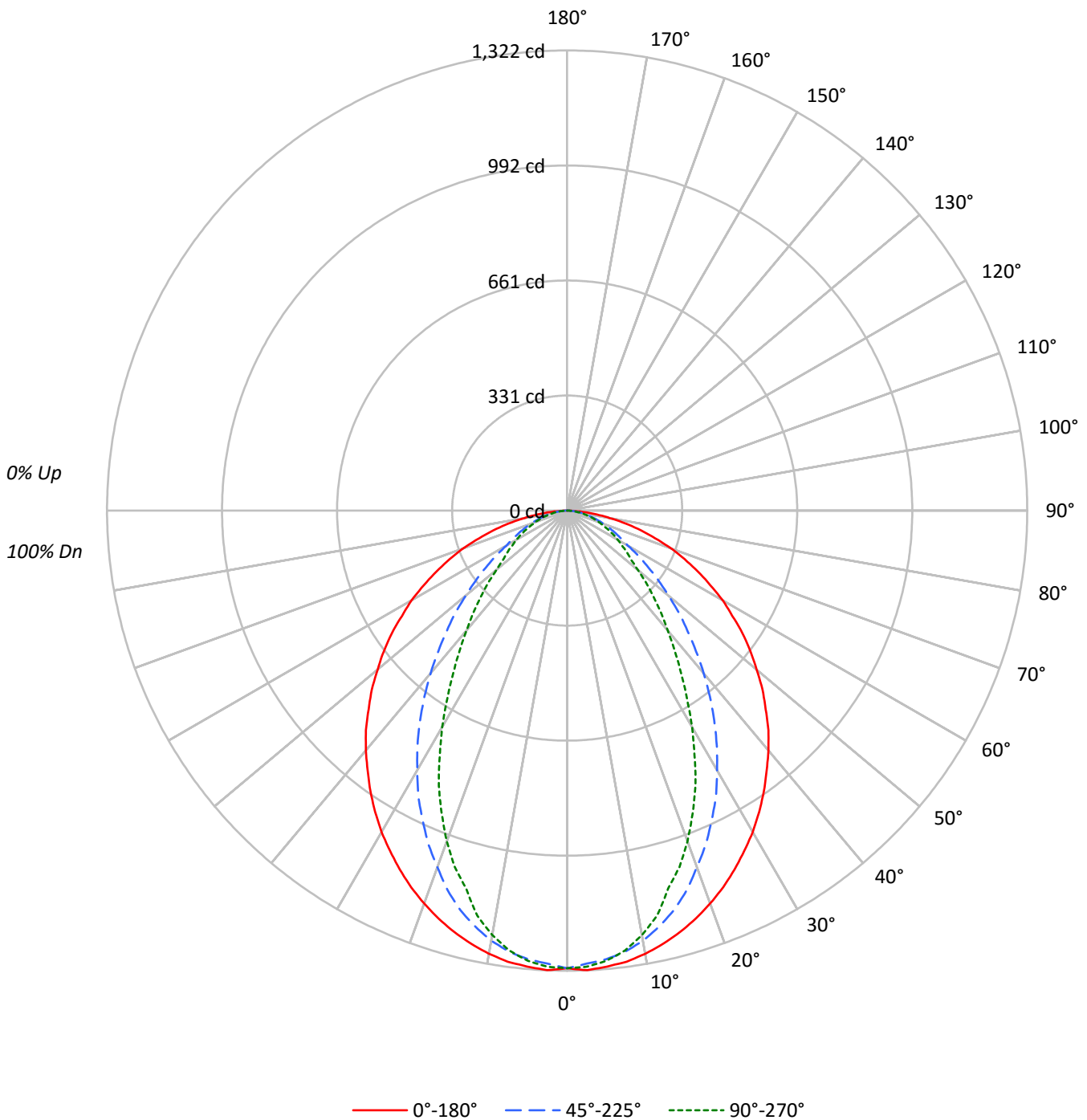
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57
5	80	69	60	54	78	67	60	54	65	59	54	64	58	53	62	57	52	50
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	38960	38960	38960
5°	39109	38478	38612
10°	38890	37750	37247
15°	38454	36436	34454
20°	37875	34363	31869
25°	37195	32094	28524
30°	36485	29471	24552
35°	35629	26644	20636
40°	34780	23617	17371
45°	33807	20499	14708
50°	32769	17466	12225
55°	31775	14738	10879
60°	30572	11953	9973
65°	29061	10706	9142
70°	27514	9651	8395
75°	25128	8678	7659
80°	21482	7610	6842
85°	16658	6425	5677



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.1	5.0
10°-20°	334.6	13.7
20°-30°	456.6	18.7
30°-40°	473.3	19.4
40°-50°	413.0	16.9
50°-60°	310.8	12.7
60°-70°	203.8	8.3
70°-80°	103.9	4.2
80°-90°	26.4	1.1
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°	914.2	37.4
0°-40°	1387.5	56.7
0°-60°	2111.3	86.3
0°-90°	2445.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2445.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1315	1315	1315	1315	1315	
5°	1315	1308	1294	1302	1298	125
15°	1254	1236	1188	1154	1123	353
25°	1138	1091	982	899	872	524
35°	985	900	737	613	570	616
45°	807	690	489	380	351	623
55°	615	468	285	216	211	549
65°	414	258	153	135	130	411
75°	220	100	76	69	67	231
85°	49	20	19	17	17	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1314.9	1314.9	1314.9	1314.9	1314.9
2.5°	1321.6	1316.0	1302.6	1313.8	1311.5
5°	1314.9	1308.2	1293.7	1301.5	1298.2
7.5°	1307.1	1298.2	1278.1	1281.4	1274.8
10°	1292.6	1281.4	1254.7	1248.0	1238.0
12.5°	1274.8	1262.5	1223.5	1207.9	1192.3
15°	1253.6	1235.8	1187.8	1154.4	1123.2
17.5°	1229.1	1206.8	1143.3	1096.5	1073.1
20°	1201.2	1172.2	1089.8	1035.2	1010.7
22.5°	1171.1	1134.4	1039.6	970.6	941.6
25°	1137.7	1090.9	981.7	899.2	872.5
27.5°	1102.0	1048.6	926.0	831.3	792.3
30°	1066.4	999.5	861.4	755.5	717.6
32.5°	1026.3	950.5	800.1	683.1	640.7
35°	985.0	900.4	736.6	612.9	570.5
37.5°	941.6	850.2	673.0	548.2	507.0
40°	899.2	795.6	610.6	485.8	449.1
42.5°	855.8	741.0	548.2	431.2	400.0
45°	806.8	689.8	489.2	380.0	351.0
47.5°	761.1	634.0	435.7	334.3	307.5
50°	710.9	579.4	378.9	291.9	265.2
52.5°	664.1	523.7	332.1	247.4	230.7
55°	615.1	468.0	285.3	216.2	210.6
57.5°	562.7	413.4	244.0	193.9	187.2
60°	515.9	361.0	201.7	173.8	168.3
62.5°	463.5	308.7	174.9	154.9	149.3
65°	414.5	258.5	152.7	134.8	130.4
67.5°	365.5	212.8	131.5	117.0	112.5
70°	317.6	169.4	111.4	100.3	96.9
72.5°	265.2	128.1	93.6	84.7	82.5
75°	219.5	100.3	75.8	69.1	66.9
77.5°	171.6	75.8	59.1	54.6	53.5
80°	125.9	54.6	44.6	41.2	40.1
82.5°	85.8	36.8	31.2	29.0	27.9
85°	49.0	20.1	18.9	16.7	16.7
87.5°	18.9	7.8	6.7	6.7	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)