

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: P242951

Luminaire Tested: **S121DR-H1025D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242951
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-47)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121DR-H1025D835-X4F0-XX-UDD-F-W
Description: DEFINE 1 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3850.5 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.09' x L: 3.88' x H: 0')
CIE Type: Direct

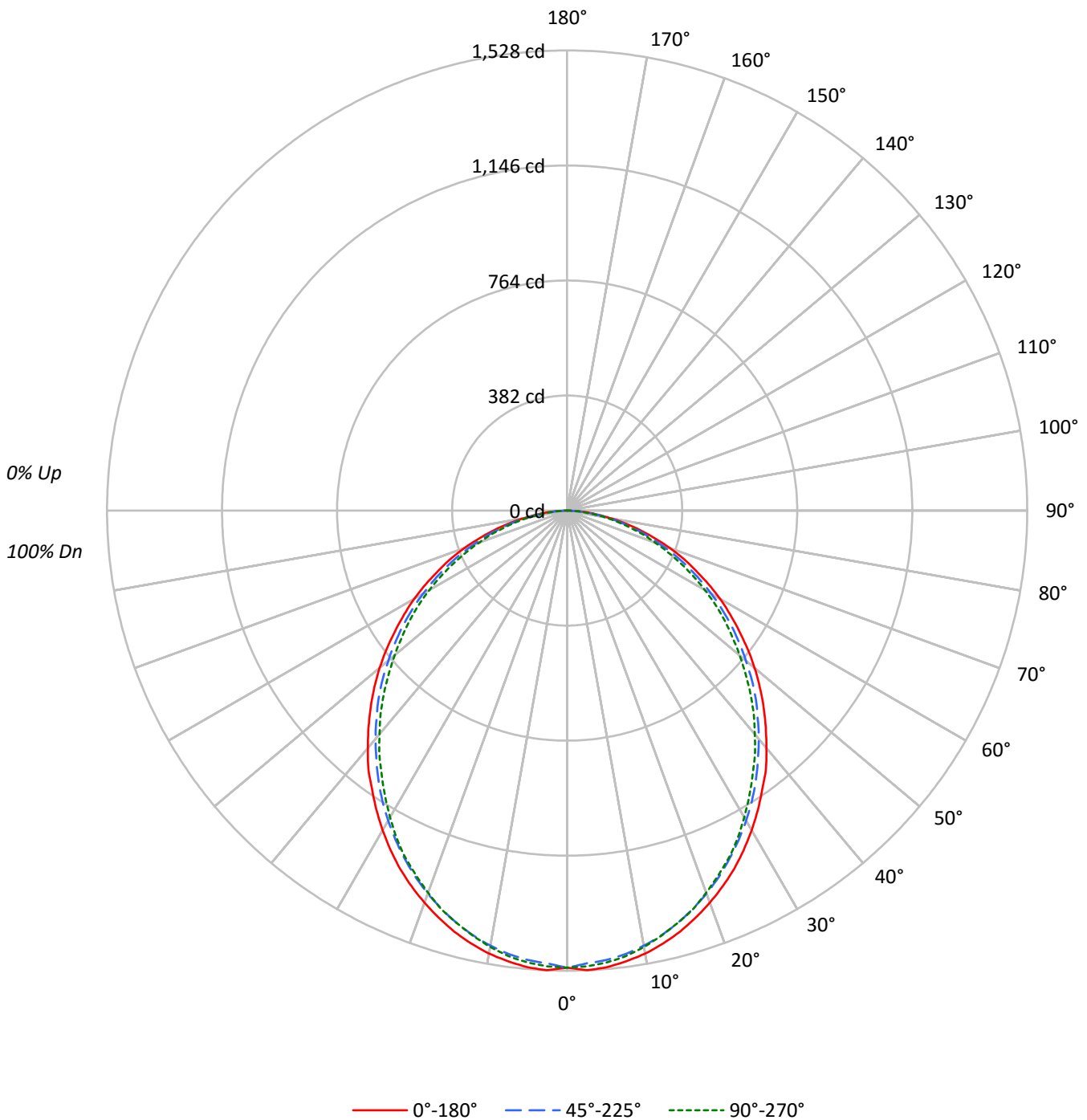
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	97	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	52
5	77	64	55	49	75	63	55	48	61	54	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	49	42	55	48	42	53	47	42	52	46	41	39
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	31	56	44	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	44969	44969	44969
5°	45269	44555	44808
10°	44944	44140	44267
15°	44399	43494	43494
20°	43687	42668	42580
25°	42906	41709	41572
30°	41918	40666	40232
35°	40855	39531	38823
40°	39824	38304	37488
45°	38664	37134	36074
50°	37476	35724	34493
55°	36042	34368	33061
60°	34762	32759	31342
65°	33036	30968	29292
70°	31317	28762	26934
75°	28666	26090	24476
80°	24963	23035	21363
85°	21520	17678	14822



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.0	3.7
10°-20°	402.4	10.5
20°-30°	591.6	15.4
30°-40°	686.6	17.8
40°-50°	684.8	17.8
50°-60°	596.1	15.5
60°-70°	438.8	11.4
70°-80°	244.4	6.3
80°-90°	62.8	1.6
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°	1137.0	29.5
0°-40°	1823.6	47.4
0°-60°	3104.5	80.6
0°-90°	3850.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3850.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1518	1518	1518	1518	1518	
5°	1522	1514	1498	1509	1506	144
15°	1447	1439	1418	1424	1418	408
25°	1312	1297	1276	1276	1272	604
35°	1130	1115	1093	1080	1073	708
45°	923	907	886	868	861	712
55°	698	685	665	647	640	625
65°	471	461	442	423	418	468
75°	250	239	228	218	214	266
85°	63	59	52	45	44	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1517.7	1517.7	1517.7	1517.7	1517.7
2.5°	1527.6	1519.1	1505.1	1517.7	1514.9
5°	1522.0	1513.5	1498.0	1509.3	1506.5
7.5°	1509.3	1502.3	1485.4	1495.2	1492.4
10°	1493.8	1485.4	1467.1	1475.5	1471.3
12.5°	1472.7	1465.7	1444.6	1451.6	1446.0
15°	1447.4	1439.0	1417.9	1423.5	1417.9
17.5°	1417.9	1409.4	1386.9	1391.1	1388.3
20°	1385.5	1374.3	1353.2	1356.0	1350.4
22.5°	1350.4	1337.7	1316.6	1316.6	1311.0
25°	1312.4	1296.9	1275.8	1275.8	1271.6
27.5°	1270.2	1256.1	1233.6	1230.8	1226.6
30°	1225.2	1211.1	1188.6	1183.0	1175.9
32.5°	1178.7	1163.3	1142.2	1132.3	1125.3
35°	1129.5	1115.4	1092.9	1080.3	1073.3
37.5°	1084.5	1064.8	1040.9	1029.6	1024.0
40°	1029.6	1012.8	990.3	974.8	969.2
42.5°	976.2	960.7	936.8	921.3	917.1
45°	922.7	907.3	886.2	867.9	860.9
47.5°	867.9	852.4	831.3	813.0	803.2
50°	813.0	797.6	775.0	756.8	748.3
52.5°	755.4	744.1	720.2	703.3	692.1
55°	697.7	685.0	665.3	647.0	640.0
57.5°	641.4	630.2	609.1	589.4	585.2
60°	586.6	575.3	552.8	535.9	528.9
62.5°	528.9	517.6	496.5	479.7	472.6
65°	471.2	461.4	441.7	423.4	417.8
67.5°	417.8	405.1	386.8	369.9	362.9
70°	361.5	347.4	332.0	317.9	310.9
72.5°	305.2	294.0	281.3	267.3	264.4
75°	250.4	239.1	227.9	218.0	213.8
77.5°	198.3	189.9	181.5	171.6	168.8
80°	146.3	140.7	135.0	128.0	125.2
82.5°	102.7	98.5	90.0	84.4	81.6
85°	63.3	59.1	52.0	45.0	43.6
87.5°	29.5	23.9	18.3	15.5	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)