

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: P242966

Luminaire Tested: **S121DR-H1025D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242966
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-H1025D935-X4F0-XX-UDD-F-W
Description: DEFINE 1 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3315.2 lumens
Efficiency: N/A
Efficacy: 87.9 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

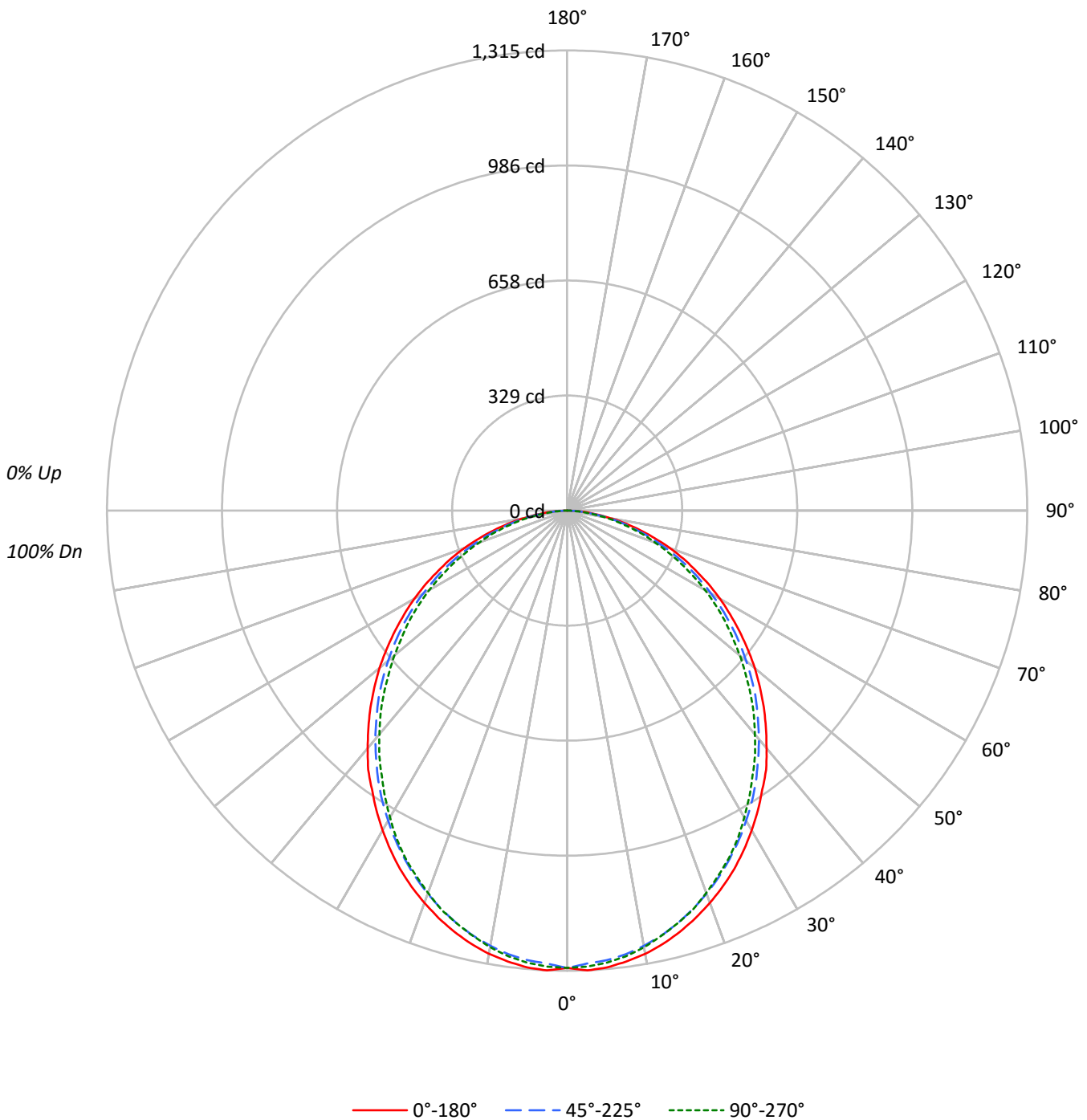
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	104	100	97	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71					71			
3	91	80	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62	60					60			
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	52					52			
5	77	64	55	49	75	63	55	48	61	54	48	59	52	47	57	51	47	45					45			
6	71	58	49	43	69	57	49	42	55	48	42	53	47	42	52	46	41	39					39			
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31					31			
9	57	44	36	31	56	44	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	38720	38720	38720
5°	38975	38362	38579
10°	38698	38006	38114
15°	38227	37448	37448
20°	37614	36737	36661
25°	36943	35913	35792
30°	36092	35014	34641
35°	35176	34037	33426
40°	34289	32978	32274
45°	33292	31972	31058
50°	32267	30760	29699
55°	31031	29595	28469
60°	29926	28207	26987
65°	28444	26663	25219
70°	26968	24759	23191
75°	24682	22461	21076
80°	21499	19844	18394
85°	18528	15230	12749



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.1	3.7
10°-20°	346.5	10.5
20°-30°	509.4	15.4
30°-40°	591.1	17.8
40°-50°	589.6	17.8
50°-60°	513.3	15.5
60°-70°	377.8	11.4
70°-80°	210.4	6.3
80°-90°	54.1	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°	979.0	29.5
0°-40°	1570.1	47.4
0°-60°	2673.0	80.6
0°-90°	3315.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3315.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1307	1307	1307	1307	1307	
5°	1310	1303	1290	1300	1297	124
15°	1246	1239	1221	1226	1221	351
25°	1130	1117	1098	1098	1095	520
35°	972	960	941	930	924	609
45°	794	781	763	747	741	613
55°	601	590	573	557	551	538
65°	406	397	380	364	360	403
75°	216	206	196	188	184	229
85°	54	51	45	39	38	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1306.8	1306.8	1306.8	1306.8	1306.8
2.5°	1315.3	1308.0	1295.9	1306.8	1304.4
5°	1310.4	1303.1	1289.8	1299.5	1297.1
7.5°	1299.5	1293.5	1278.9	1287.4	1285.0
10°	1286.2	1278.9	1263.2	1270.4	1266.8
12.5°	1268.0	1262.0	1243.8	1249.9	1245.0
15°	1246.2	1239.0	1220.8	1225.6	1220.8
17.5°	1220.8	1213.5	1194.1	1197.8	1195.4
20°	1192.9	1183.2	1165.1	1167.5	1162.7
22.5°	1162.7	1151.8	1133.6	1133.6	1128.7
25°	1130.0	1116.6	1098.5	1098.5	1094.8
27.5°	1093.6	1081.5	1062.1	1059.7	1056.1
30°	1054.9	1042.8	1023.4	1018.5	1012.5
32.5°	1014.9	1001.6	983.4	974.9	968.9
35°	972.5	960.4	941.0	930.1	924.1
37.5°	933.8	916.8	896.2	886.5	881.7
40°	886.5	872.0	852.6	839.3	834.4
42.5°	840.5	827.2	806.6	793.3	789.6
45°	794.5	781.2	763.0	747.2	741.2
47.5°	747.2	733.9	715.8	700.0	691.5
50°	700.0	686.7	667.3	651.6	644.3
52.5°	650.4	640.7	620.1	605.5	595.9
55°	600.7	589.8	572.9	557.1	551.1
57.5°	552.3	542.6	524.4	507.5	503.8
60°	505.0	495.3	476.0	461.4	455.4
62.5°	455.4	445.7	427.5	413.0	406.9
65°	405.7	397.2	380.3	364.5	359.7
67.5°	359.7	348.8	333.1	318.5	312.5
70°	311.3	299.1	285.8	273.7	267.7
72.5°	262.8	253.1	242.2	230.1	227.7
75°	215.6	205.9	196.2	187.7	184.1
77.5°	170.8	163.5	156.2	147.8	145.3
80°	126.0	121.1	116.3	110.2	107.8
82.5°	88.4	84.8	77.5	72.7	70.2
85°	54.5	50.9	44.8	38.8	37.5
87.5°	25.4	20.6	15.7	13.3	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)