

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: P242106

Luminaire Tested: **S121DR-S1025D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242106
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121DR-S1025D935-X4F0-XX-UDD-F-W
Description: DEFINE 1 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3509.6 lumens
Efficiency: N/A
Efficacy: 85.4 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

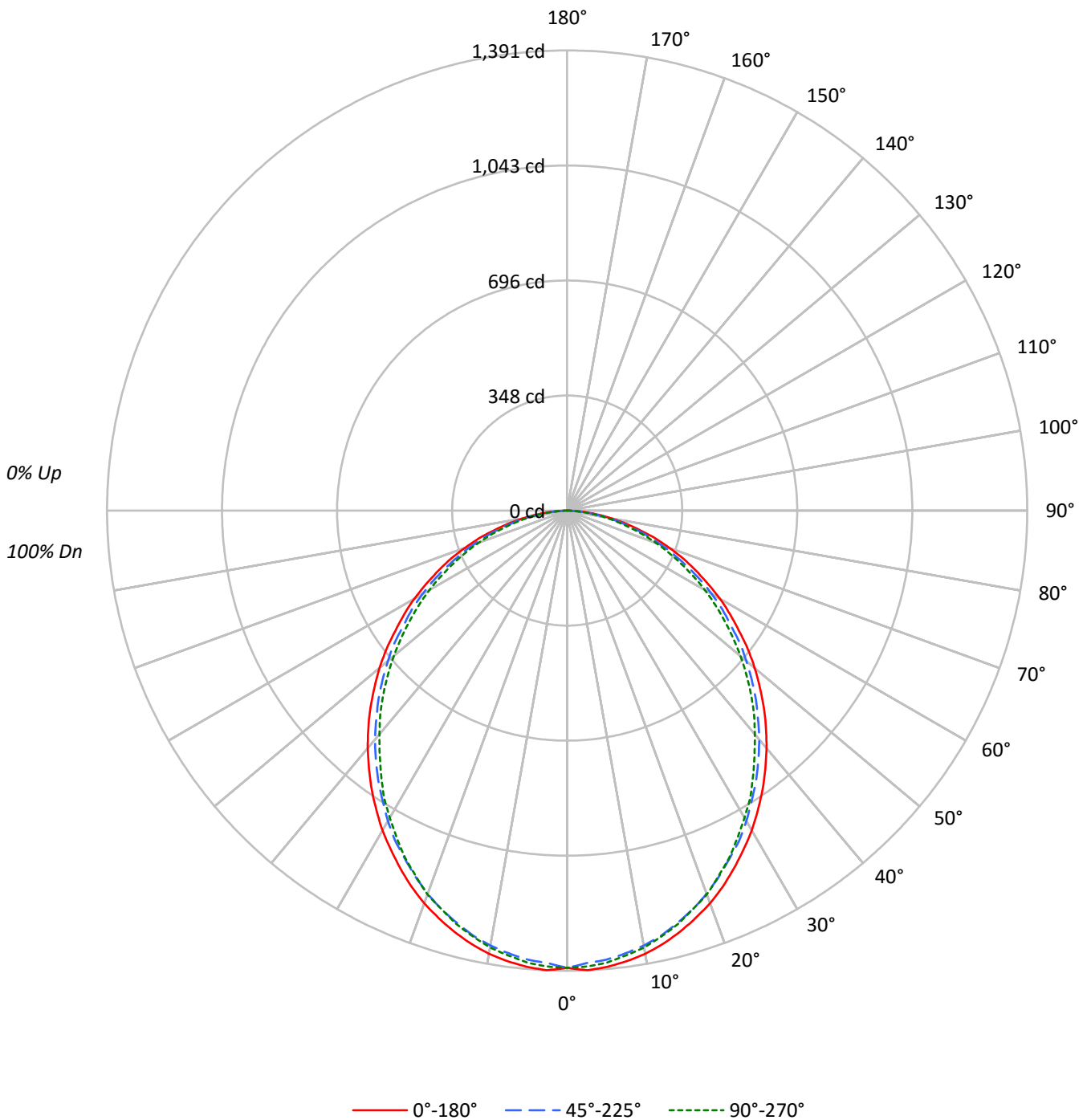
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	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	72	66	88	79	71	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°	40948	40948	40948
5°	41179	40534	40801
10°	40927	40160	40349
15°	40436	39574	39690
20°	39833	38869	38947
25°	39006	37963	37881
30°	38203	37067	36673
35°	37249	36001	35448
40°	36277	34946	34153
45°	35236	33795	32940
50°	34115	32585	31529
55°	32761	31113	29993
60°	31609	29944	28587
65°	30063	28093	26663
70°	28302	26197	24759
75°	25998	23812	22209
80°	23086	20902	19384
85°	19072	15604	13870



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	3.7
10°-20°	366.4	10.4
20°-30°	539.0	15.4
30°-40°	625.8	17.8
40°-50°	624.3	17.8
50°-60°	543.3	15.5
60°-70°	400.2	11.4
70°-80°	222.9	6.4
80°-90°	57.5	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°	1035.5	29.5
0°-40°	1661.3	47.3
0°-60°	2829.0	80.6
0°-90°	3509.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3509.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1382	1382	1382	1382	1382	
5°	1384	1378	1363	1374	1372	131
15°	1318	1308	1290	1299	1294	372
25°	1193	1180	1161	1164	1159	550
35°	1030	1017	995	985	980	644
45°	841	827	806	791	786	648
55°	634	626	602	591	581	569
65°	429	420	401	388	380	426
75°	227	221	208	199	194	242
85°	56	54	46	43	41	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1382.0	1382.0	1382.0	1382.0	1382.0
2.5°	1390.9	1383.3	1369.2	1380.7	1379.4
5°	1384.5	1378.2	1362.8	1374.3	1371.8
7.5°	1374.3	1366.7	1350.1	1360.3	1356.5
10°	1360.3	1352.6	1334.8	1342.4	1341.1
12.5°	1341.1	1332.2	1315.6	1322.0	1318.2
15°	1318.2	1308.0	1290.1	1299.0	1293.9
17.5°	1291.4	1279.9	1263.3	1268.4	1263.3
20°	1263.3	1250.5	1232.7	1237.8	1235.2
22.5°	1230.1	1218.6	1198.2	1200.8	1195.7
25°	1193.1	1180.4	1161.2	1163.8	1158.7
27.5°	1154.8	1143.4	1125.5	1121.7	1115.3
30°	1116.6	1102.5	1083.4	1078.3	1071.9
32.5°	1073.2	1060.4	1038.7	1033.6	1029.8
35°	1029.8	1017.0	995.3	985.1	980.0
37.5°	983.8	971.1	949.4	937.9	930.3
40°	937.9	923.9	903.5	892.0	883.0
42.5°	889.4	876.7	853.7	842.2	835.8
45°	840.9	826.9	806.5	791.2	786.1
47.5°	789.9	777.1	756.7	740.1	735.0
50°	740.1	726.1	706.9	690.4	684.0
52.5°	689.1	676.3	658.5	641.9	631.7
55°	634.2	626.5	602.3	590.8	580.6
57.5°	584.4	575.5	556.4	537.2	530.8
60°	533.4	523.2	505.3	488.7	482.4
62.5°	479.8	472.1	454.3	439.0	430.0
65°	428.8	419.8	400.7	387.9	380.3
67.5°	381.5	370.1	350.9	338.2	331.8
70°	326.7	317.7	302.4	292.2	285.8
72.5°	279.5	269.3	255.2	245.0	238.6
75°	227.1	220.8	208.0	199.1	194.0
77.5°	181.2	172.3	163.3	157.0	153.1
80°	135.3	128.9	122.5	116.1	113.6
82.5°	94.4	89.3	82.9	79.1	75.3
85°	56.1	53.6	45.9	43.4	40.8
87.5°	26.8	23.0	15.3	14.0	12.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)