

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: P231662

Luminaire Tested: **S121-DR-2-40-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231662
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33906)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121-DR-2-40-X-0048-1-U-DD-1-W
Description: DEFINE 1 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3767.3 lumens
Efficiency: N/A
Efficacy: 88.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.1' x L: 3.92' x H: 0')
CIE Type: Direct

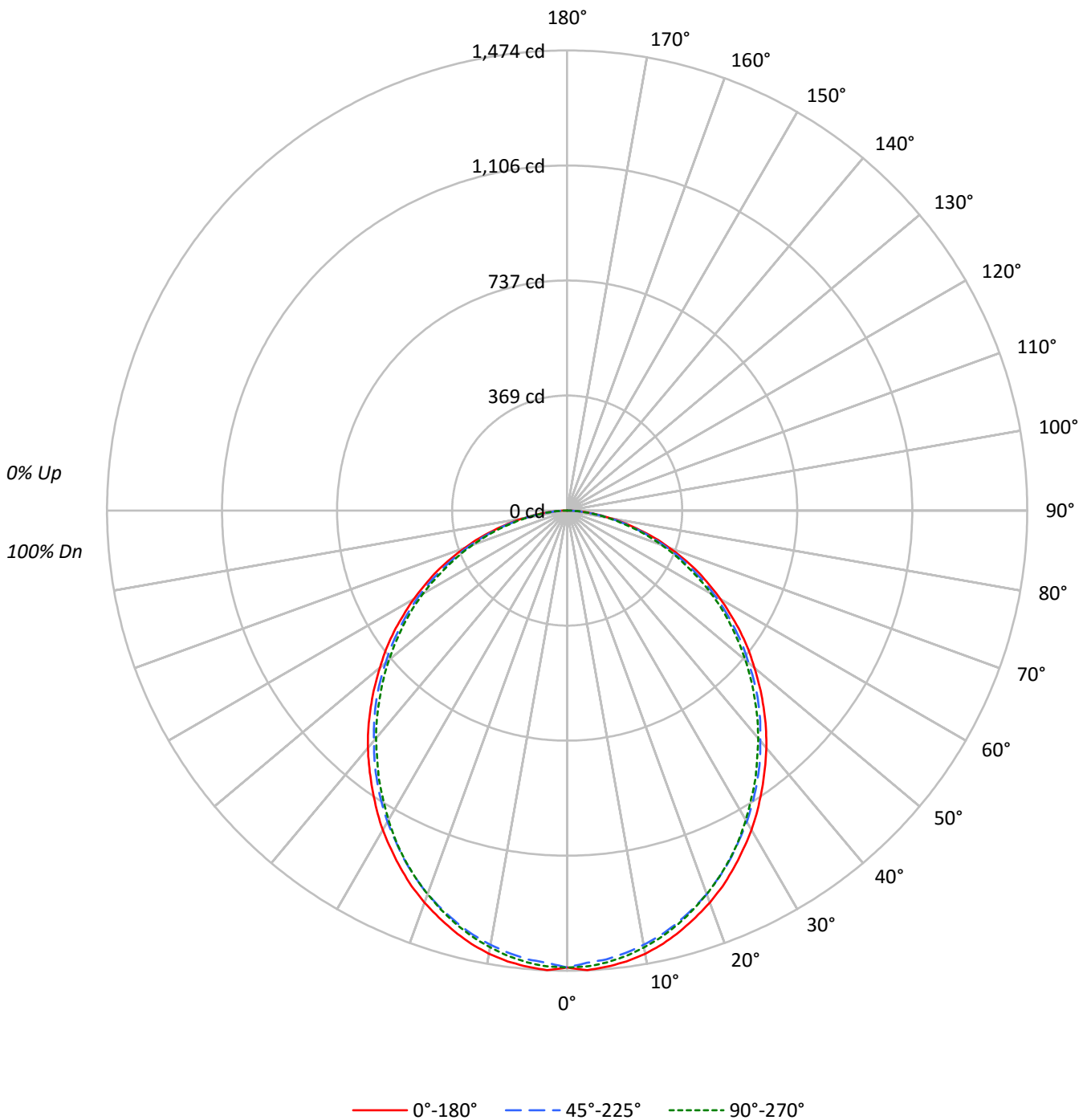
Input Watts (W): 42.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	48	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	40913	40913	40913
5°	41165	40497	40783
10°	40917	40096	40337
15°	40391	39554	39702
20°	39751	38891	38891
25°	38964	38072	38020
30°	38145	37157	36938
35°	37140	36212	35863
40°	36244	35131	34759
45°	35173	34232	33560
50°	34038	33008	32416
55°	33018	31858	31195
60°	31704	30658	29808
65°	30437	29087	28075
70°	28446	27334	26370
75°	26043	24942	24023
80°	22685	21590	20769
85°	19054	17418	16873



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.9	3.7
10°-20°	388.1	10.3
20°-30°	571.9	15.2
30°-40°	666.6	17.7
40°-50°	668.8	17.8
50°-60°	587.2	15.6
60°-70°	437.0	11.6
70°-80°	244.8	6.5
80°-90°	65.1	1.7
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°	1097.9	29.1
0°-40°	1764.5	46.8
0°-60°	3020.4	80.2
0°-90°	3767.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3767.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1463	1463	1463	1463	1463	
5°	1467	1458	1443	1457	1453	139
15°	1396	1384	1367	1377	1372	393
25°	1263	1250	1234	1236	1232	582
35°	1088	1076	1061	1056	1051	681
45°	890	881	866	854	849	686
55°	677	669	654	645	640	605
65°	460	452	440	431	424	454
75°	241	236	231	222	222	257
85°	59	58	54	54	53	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1463.4	1463.4	1463.4	1463.4	1463.4
2.5°	1473.6	1465.1	1449.8	1465.1	1461.7
5°	1466.8	1458.3	1443.0	1456.6	1453.2
7.5°	1456.6	1446.4	1429.4	1443.0	1439.6
10°	1441.3	1427.7	1412.4	1422.6	1420.9
12.5°	1420.9	1409.1	1392.1	1402.3	1398.9
15°	1395.5	1383.6	1366.6	1376.8	1371.7
17.5°	1366.6	1354.7	1337.7	1346.2	1341.1
20°	1336.1	1322.5	1307.2	1314.0	1307.2
22.5°	1302.1	1288.5	1271.5	1276.6	1271.5
25°	1263.1	1249.5	1234.2	1235.9	1232.5
27.5°	1222.3	1210.4	1191.8	1195.1	1190.1
30°	1181.6	1169.7	1151.0	1149.3	1144.2
32.5°	1135.7	1123.8	1106.9	1103.5	1096.7
35°	1088.2	1076.3	1061.0	1055.9	1050.8
37.5°	1040.7	1030.5	1013.5	1006.7	999.9
40°	993.1	981.2	962.6	955.8	952.4
42.5°	942.2	930.3	915.0	904.8	901.5
45°	889.6	881.1	865.8	853.9	848.8
47.5°	836.9	828.5	813.2	801.3	797.9
50°	782.6	775.8	758.9	748.7	745.3
52.5°	731.7	724.9	707.9	697.7	692.6
55°	677.4	668.9	653.6	645.1	640.0
57.5°	621.3	616.2	601.0	592.5	587.4
60°	567.0	560.2	548.3	536.5	533.1
62.5°	512.7	507.6	494.0	483.8	478.7
65°	460.1	451.6	439.7	431.2	424.4
67.5°	404.0	398.9	387.1	378.6	373.5
70°	348.0	342.9	334.4	325.9	322.6
72.5°	297.1	288.6	280.1	275.0	271.6
75°	241.1	236.0	230.9	222.4	222.4
77.5°	191.8	185.0	181.6	176.6	173.2
80°	140.9	139.2	134.1	132.4	129.0
82.5°	100.2	96.8	91.7	90.0	88.3
85°	59.4	57.7	54.3	54.3	52.6
87.5°	27.2	25.5	22.1	20.4	20.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)