

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: P231674

Luminaire Tested: **S122-DR-2-40-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231674
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33909)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122-DR-2-40-X-0048-1-U-DD-1-W
Description: DEFINE 2 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: 3766.1 lumens
Efficiency: N/A
Efficacy: 88.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.14' x L: 3.92' x H: 0')
CIE Type: Direct

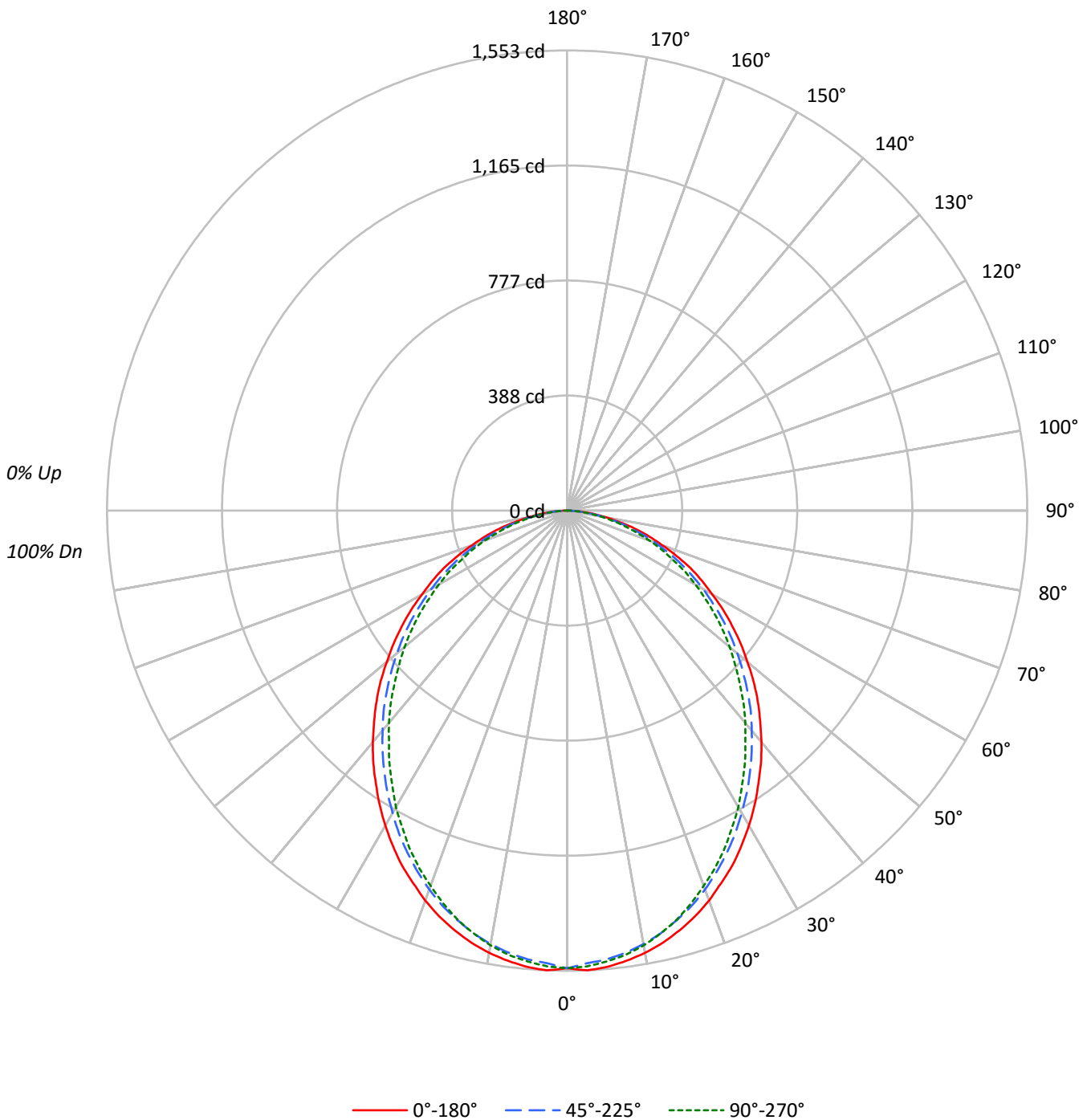
Input Watts (W): 42.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	65	56	49	75	63	55	49	61	54	48	59	53	48	58	52	47	45
6	71	58	50	43	69	57	49	43	56	48	43	54	47	42	52	46	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	30321	30321	30321
5°	30470	29967	30101
10°	30212	29604	29704
15°	29803	29078	29043
20°	29252	28437	28153
25°	28601	27609	27241
30°	27817	26699	26201
35°	26967	25788	25054
40°	26140	24836	23965
45°	25257	23888	22853
50°	24257	22910	21875
55°	23293	21900	20794
60°	22190	20792	19658
65°	21366	19629	18292
70°	19583	18119	16949
75°	18021	16223	15063
80°	15352	14006	13045
85°	12613	11081	9933



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.1	3.9
10°-20°	405.9	10.8
20°-30°	590.5	15.7
30°-40°	676.4	18.0
40°-50°	666.2	17.7
50°-60°	574.5	15.3
60°-70°	419.9	11.1
70°-80°	229.1	6.1
80°-90°	58.5	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°	1141.5	30.3
0°-40°	1817.9	48.3
0°-60°	3058.6	81.2
0°-90°	3766.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3766.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1545	1545	1545	1545	1545	
5°	1546	1538	1521	1531	1528	147
15°	1466	1453	1431	1434	1429	413
25°	1320	1304	1275	1268	1258	607
35°	1125	1108	1076	1056	1046	704
45°	910	891	860	837	823	701
55°	681	670	640	616	608	609
65°	460	445	423	404	394	451
75°	238	226	214	204	199	250
85°	56	53	49	46	44	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1544.6	1544.6	1544.6	1544.6	1544.6
2.5°	1553.0	1546.3	1529.3	1542.9	1539.5
5°	1546.3	1537.8	1520.8	1531.0	1527.6
7.5°	1532.7	1524.2	1505.5	1515.7	1512.3
10°	1515.7	1503.8	1485.2	1493.6	1490.2
12.5°	1493.6	1480.1	1461.4	1468.2	1461.4
15°	1466.5	1452.9	1430.8	1434.2	1429.1
17.5°	1435.9	1420.7	1398.6	1398.6	1390.1
20°	1400.3	1385.0	1361.3	1356.2	1347.7
22.5°	1359.6	1344.3	1318.8	1315.4	1305.2
25°	1320.5	1303.5	1274.7	1267.9	1257.7
27.5°	1274.7	1257.7	1228.9	1215.3	1205.1
30°	1227.2	1208.5	1177.9	1166.1	1155.9
32.5°	1177.9	1161.0	1128.7	1111.7	1098.2
35°	1125.3	1108.4	1076.1	1055.7	1045.5
37.5°	1074.4	1054.0	1023.5	1001.4	987.8
40°	1020.1	999.7	969.2	947.1	935.2
42.5°	964.1	945.4	916.6	891.1	880.9
45°	909.8	891.1	860.5	836.8	823.2
47.5°	853.8	835.1	804.5	779.1	768.9
50°	794.3	780.8	750.2	724.8	716.3
52.5°	738.3	724.8	695.9	670.4	662.0
55°	680.6	670.4	639.9	616.1	607.6
57.5°	624.6	612.7	583.9	563.5	551.6
60°	565.2	555.0	529.6	509.2	500.7
62.5°	512.6	500.7	475.2	456.6	449.8
65°	460.0	444.7	422.6	404.0	393.8
67.5°	398.9	390.4	368.3	349.6	346.3
70°	341.2	332.7	315.7	300.4	295.3
72.5°	290.2	280.1	263.1	251.2	244.4
75°	237.6	225.7	213.9	203.7	198.6
77.5°	183.3	178.2	166.3	157.9	154.5
80°	135.8	132.4	123.9	115.4	115.4
82.5°	95.0	90.0	83.2	78.1	76.4
85°	56.0	52.6	49.2	45.8	44.1
87.5°	23.8	22.1	18.7	17.0	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)