

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: P231758

Luminaire Tested: **S124-RDR-2-40-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231758
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33917)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124-RDR-2-40-X-0048-1-U-DD-1-W
Description: DEFINE 4 LED LINEAR REGRESSED 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: 4144.9 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.1 / 1.25
Luminous Opening: Rectangular (W 0.31' x L: 3.92' x H: 0')
CIE Type: Direct

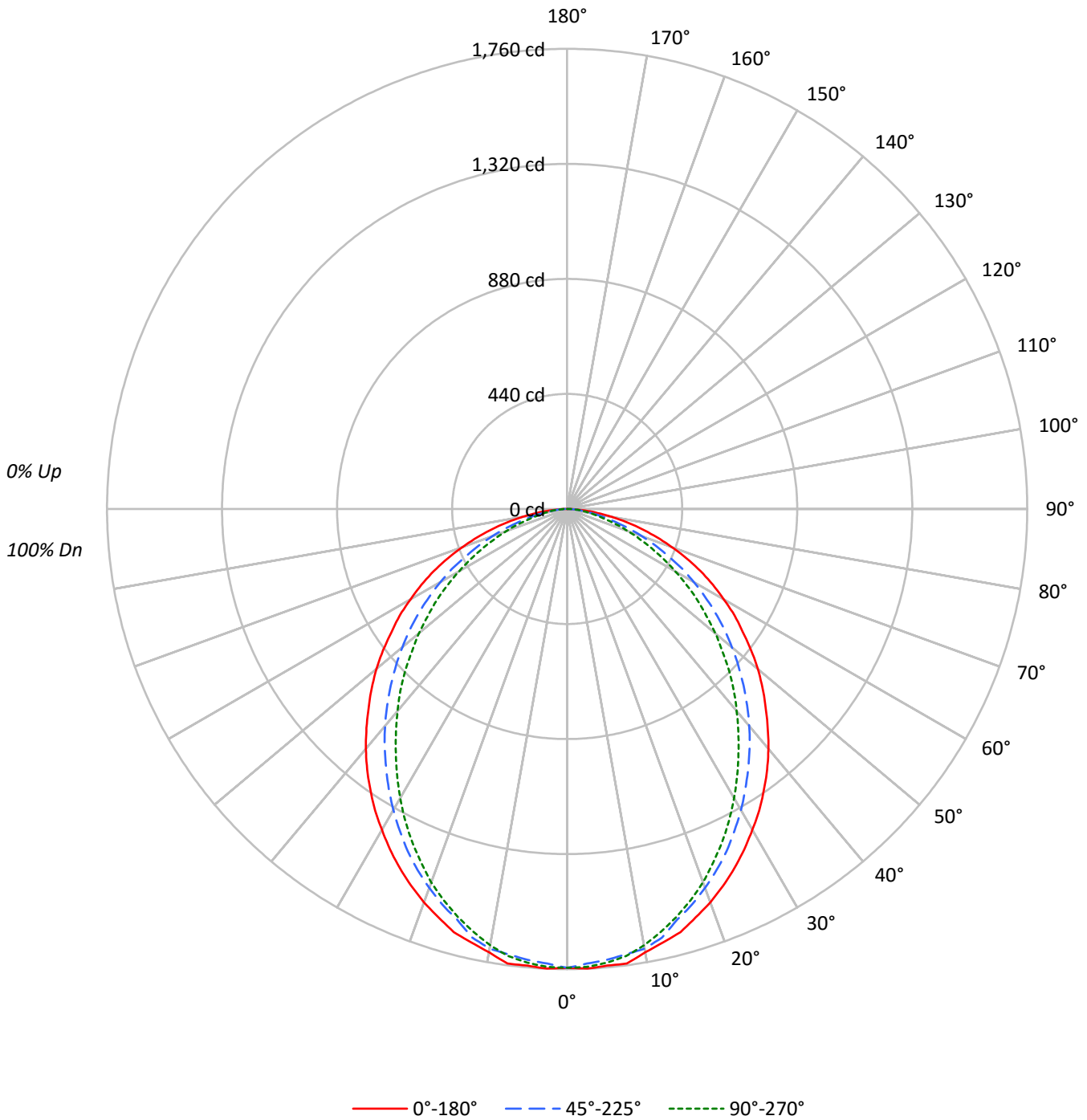
Input Watts (W): 42.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	98	90	85	79	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	49	41	35	47	40	35	46	39	35	45	39	35	33
9	58	45	37	32	57	45	37	32	44	37	32	43	36	31	41	36	31	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15723	15723	15723
5°	15769	15569	15669
10°	15663	15533	15417
15°	15542	15086	14983
20°	15265	14705	14493
25°	14981	14275	13882
30°	14659	13756	13215
35°	14353	13208	12495
40°	14011	12675	11802
45°	13611	12083	11098
50°	13270	11478	10328
55°	12813	10806	9517
60°	12396	10038	8559
65°	11941	9049	7569
70°	11140	7980	6484
75°	10217	6592	5162
80°	8839	5078	4582
85°	7176	4400	4082



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.4	4.0
10°-20°	462.1	11.1
20°-30°	669.3	16.1
30°-40°	762.1	18.4
40°-50°	743.7	17.9
50°-60°	628.0	15.1
60°-70°	439.0	10.6
70°-80°	220.8	5.3
80°-90°	54.6	1.3
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°	1296.8	31.3
0°-40°	2058.9	49.7
0°-60°	3430.6	82.8
0°-90°	4144.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4144.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1755	1755	1755	1755	1755	
5°	1753	1747	1731	1745	1742	167
15°	1675	1663	1626	1626	1615	471
25°	1515	1493	1444	1420	1404	698
35°	1312	1274	1207	1163	1142	821
45°	1074	1033	954	896	876	830
55°	820	773	692	630	609	735
65°	563	508	427	376	357	555
75°	295	249	190	159	149	312
85°	70	46	43	41	40	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1754.7	1754.7	1754.7	1754.7	1754.7
2.5°	1759.5	1756.3	1740.4	1756.3	1753.1
5°	1753.1	1746.8	1730.9	1745.2	1742.0
7.5°	1753.1	1745.2	1718.2	1727.8	1724.6
10°	1721.4	1726.2	1707.1	1697.6	1694.4
12.5°	1697.6	1689.7	1678.6	1664.3	1656.4
15°	1675.4	1662.7	1626.2	1626.2	1615.1
17.5°	1637.3	1627.8	1586.6	1586.6	1569.1
20°	1600.8	1586.6	1542.1	1542.1	1519.9
22.5°	1559.6	1543.7	1494.5	1489.8	1461.2
25°	1515.2	1492.9	1443.8	1420.0	1404.1
27.5°	1467.6	1440.6	1386.6	1356.5	1342.2
30°	1416.8	1388.2	1329.5	1293.0	1277.2
32.5°	1367.6	1334.3	1269.2	1229.6	1210.5
35°	1312.1	1274.0	1207.4	1162.9	1142.3
37.5°	1256.6	1218.5	1147.1	1096.3	1075.7
40°	1197.8	1155.0	1083.6	1031.3	1009.0
42.5°	1136.0	1093.1	1018.6	963.0	944.0
45°	1074.1	1032.8	953.5	896.4	875.8
47.5°	1013.8	967.8	888.5	828.2	804.4
50°	951.9	904.3	823.4	763.1	740.9
52.5°	886.9	839.3	758.4	696.5	671.1
55°	820.2	772.7	691.7	629.9	609.2
57.5°	760.0	706.0	625.1	564.8	542.6
60°	691.7	637.8	560.1	499.8	477.6
62.5°	628.3	572.7	496.6	437.9	415.7
65°	563.2	507.7	426.8	376.0	357.0
67.5°	495.0	442.6	364.9	317.3	299.9
70°	425.2	374.4	304.6	261.8	247.5
72.5°	360.1	311.0	245.9	207.8	198.3
75°	295.1	249.1	190.4	158.7	149.1
77.5°	231.6	190.4	141.2	117.4	114.2
80°	171.3	136.4	98.4	88.8	88.8
82.5°	117.4	85.7	68.2	65.0	65.0
85°	69.8	46.0	42.8	41.3	39.7
87.5°	30.1	20.6	19.0	17.5	17.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)