

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: P231696

Luminaire Tested: **S124-DR-2-30-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231696
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29680)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124-DR-2-30-X-0048-1-U-DD-1-W
Description: DEFINE 4 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3976.5 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.13 / 1.27
Luminous Opening: Rectangular (W 0.31' x L: 3.92' x H: 0')
CIE Type: Direct

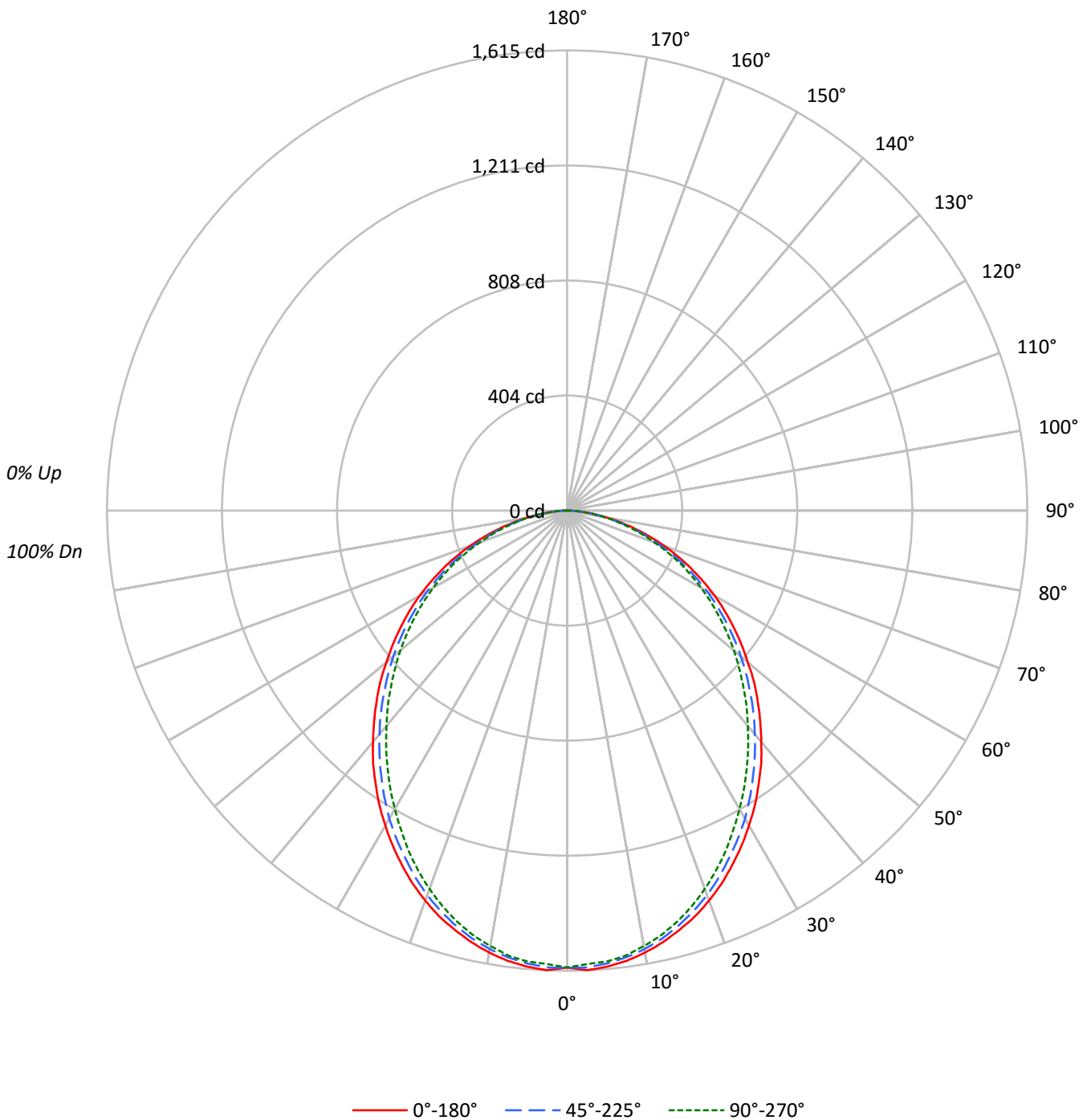
Input Watts (W): 42.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	97	106	102	98	95	98	95	92	94	92	89	90	88	87	84
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	65	73	68	63	71	66	62	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	28
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°	14370	14370	14370
5°	14449	14351	14290
10°	14332	14220	14120
15°	14131	13992	13853
20°	13889	13694	13473
25°	13565	13296	13026
30°	13210	12914	12519
35°	12818	12445	12027
40°	12399	11985	11539
45°	11983	11534	11084
50°	11529	11092	10656
55°	11132	10622	10195
60°	10719	10158	9742
65°	10169	9620	9244
70°	9495	8853	8496
75°	8538	8018	7783
80°	7312	6961	6889
85°	6169	5881	5747



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.0	3.8
10°-20°	423.6	10.7
20°-30°	617.2	15.5
30°-40°	708.8	17.8
40°-50°	701.0	17.6
50°-60°	609.0	15.3
60°-70°	450.2	11.3
70°-80°	248.1	6.2
80°-90°	67.4	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°	1191.9	30.0
0°-40°	1900.6	47.8
0°-60°	3210.7	80.7
0°-90°	3976.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3976.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1604	1604	1604	1604	1604	
5°	1606	1589	1596	1590	1589	152
15°	1523	1506	1508	1496	1493	429
25°	1372	1353	1345	1320	1318	632
35°	1172	1153	1138	1106	1100	733
45°	946	931	910	883	875	730
55°	713	702	680	658	653	638
65°	480	471	454	439	436	475
75°	247	238	232	226	225	263
85°	60	59	57	57	56	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1603.7	1603.7	1603.7	1603.7	1603.7
2.5°	1614.6	1598.2	1605.0	1600.9	1592.8
5°	1606.4	1588.7	1595.5	1590.0	1588.7
7.5°	1594.1	1576.4	1581.9	1575.1	1575.1
10°	1575.1	1557.3	1562.8	1553.3	1551.9
12.5°	1551.9	1532.8	1538.3	1526.0	1526.0
15°	1523.3	1505.6	1508.3	1496.0	1493.3
17.5°	1493.3	1472.9	1474.2	1459.2	1455.2
20°	1456.5	1436.1	1436.1	1415.6	1412.9
22.5°	1417.0	1396.6	1392.5	1369.3	1366.6
25°	1372.0	1353.0	1344.8	1320.3	1317.5
27.5°	1325.7	1306.6	1298.5	1269.9	1263.0
30°	1276.7	1256.2	1248.1	1215.4	1209.9
32.5°	1226.3	1205.8	1193.6	1162.2	1155.4
35°	1171.8	1152.7	1137.7	1106.4	1099.5
37.5°	1118.6	1099.5	1081.8	1050.5	1043.7
40°	1060.0	1042.3	1024.6	993.3	986.5
42.5°	1002.8	987.8	968.7	938.8	932.0
45°	945.6	930.6	910.2	882.9	874.7
47.5°	889.7	873.4	852.9	824.3	818.9
50°	827.0	816.1	795.7	769.8	764.4
52.5°	771.2	757.6	738.5	714.0	708.5
55°	712.6	701.7	679.9	658.1	652.6
57.5°	655.4	644.5	624.0	603.6	598.1
60°	598.1	585.9	566.8	549.1	543.6
62.5°	538.2	528.7	509.6	493.2	489.1
65°	479.6	471.4	453.7	438.7	436.0
67.5°	421.0	411.5	397.9	385.6	380.1
70°	362.4	354.3	337.9	328.4	324.3
72.5°	303.8	294.3	284.8	278.0	275.2
75°	246.6	238.4	231.6	226.2	224.8
77.5°	193.5	186.7	181.2	178.5	177.1
80°	141.7	139.0	134.9	133.5	133.5
82.5°	96.7	95.4	94.0	92.7	92.7
85°	60.0	58.6	57.2	57.2	55.9
87.5°	28.6	27.3	28.6	27.3	27.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)