

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: P231697

Luminaire Tested: **S124-DR-2-35-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231697
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-2-35-X-0048-1-U-DD-1-W
Description: DEFINE 4 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4135.5 lumens
Efficiency: N/A
Efficacy: 97.1 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

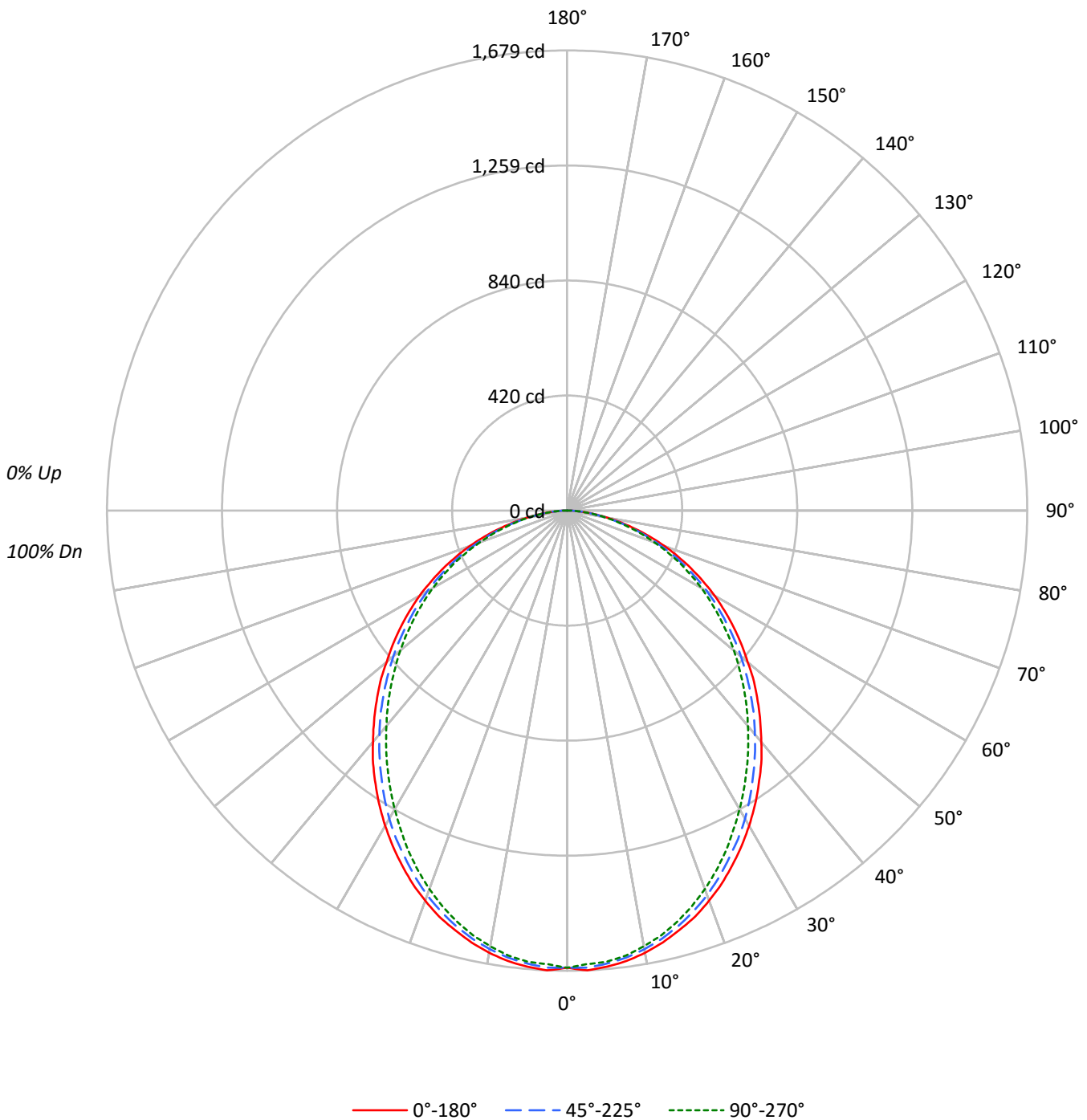
Input Watts (W): 42.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	14944	14944	14944
5°	15027	14925	14861
10°	14905	14788	14685
15°	14696	14551	14407
20°	14445	14241	14012
25°	14108	13828	13547
30°	13737	13430	13019
35°	13330	12943	12509
40°	12895	12465	12000
45°	12462	11995	11528
50°	11990	11536	11081
55°	11578	11047	10603
60°	11149	10565	10133
65°	10576	10005	9613
70°	9874	9206	8834
75°	8880	8340	8094
80°	7606	7240	7168
85°	6405	6117	5973



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.1	3.8
10°-20°	440.5	10.7
20°-30°	641.9	15.5
30°-40°	737.1	17.8
40°-50°	729.0	17.6
50°-60°	633.4	15.3
60°-70°	468.3	11.3
70°-80°	258.0	6.2
80°-90°	70.1	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°	1239.5	30.0
0°-40°	1976.7	47.8
0°-60°	3339.1	80.7
0°-90°	4135.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4135.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1668	1668	1668	1668	1668	
5°	1671	1652	1659	1654	1652	158
15°	1584	1566	1569	1556	1553	447
25°	1427	1407	1399	1373	1370	657
35°	1219	1199	1183	1151	1144	762
45°	983	968	947	918	910	759
55°	741	730	707	684	679	663
65°	499	490	472	456	453	494
75°	256	248	241	235	234	273
85°	62	61	60	60	58	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1667.8	1667.8	1667.8	1667.8	1667.8
2.5°	1679.2	1662.1	1669.2	1665.0	1656.5
5°	1670.6	1652.2	1659.3	1653.6	1652.2
7.5°	1657.9	1639.5	1645.1	1638.1	1638.1
10°	1638.1	1619.6	1625.3	1615.4	1614.0
12.5°	1614.0	1594.1	1599.8	1587.0	1587.0
15°	1584.2	1565.8	1568.6	1555.9	1553.0
17.5°	1553.0	1531.8	1533.2	1517.6	1513.4
20°	1514.8	1493.5	1493.5	1472.3	1469.4
22.5°	1473.7	1452.4	1448.2	1424.1	1421.3
25°	1426.9	1407.1	1398.6	1373.1	1370.2
27.5°	1378.7	1358.9	1350.4	1320.6	1313.6
30°	1327.7	1306.5	1298.0	1264.0	1258.3
32.5°	1275.3	1254.0	1241.3	1208.7	1201.6
35°	1218.6	1198.8	1183.2	1150.6	1143.5
37.5°	1163.4	1143.5	1125.1	1092.5	1085.4
40°	1102.4	1084.0	1065.6	1033.0	1025.9
42.5°	1042.9	1027.3	1007.5	976.3	969.2
45°	983.4	967.8	946.6	918.2	909.7
47.5°	925.3	908.3	887.0	857.3	851.6
50°	860.1	848.8	827.5	800.6	794.9
52.5°	802.0	787.9	768.0	742.5	736.8
55°	741.1	729.8	707.1	684.4	678.7
57.5°	681.6	670.2	649.0	627.7	622.1
60°	622.1	609.3	589.5	571.1	565.4
62.5°	559.7	549.8	530.0	513.0	508.7
65°	498.8	490.3	471.9	456.3	453.4
67.5°	437.9	427.9	413.8	401.0	395.3
70°	376.9	368.4	351.4	341.5	337.2
72.5°	316.0	306.1	296.2	289.1	286.2
75°	256.5	248.0	240.9	235.2	233.8
77.5°	201.2	194.1	188.5	185.6	184.2
80°	147.4	144.5	140.3	138.9	138.9
82.5°	100.6	99.2	97.8	96.4	96.4
85°	62.3	60.9	59.5	59.5	58.1
87.5°	29.8	28.3	29.8	28.3	28.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)