

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: P243566

Luminaire Tested: **S124RDR-H1195D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243566
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-65)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124RDR-H1195D830-X4F0-XX-UDD-F-W
Description: DEFINE 4 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4236.2 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.1 / 1.25
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')
CIE Type: Direct

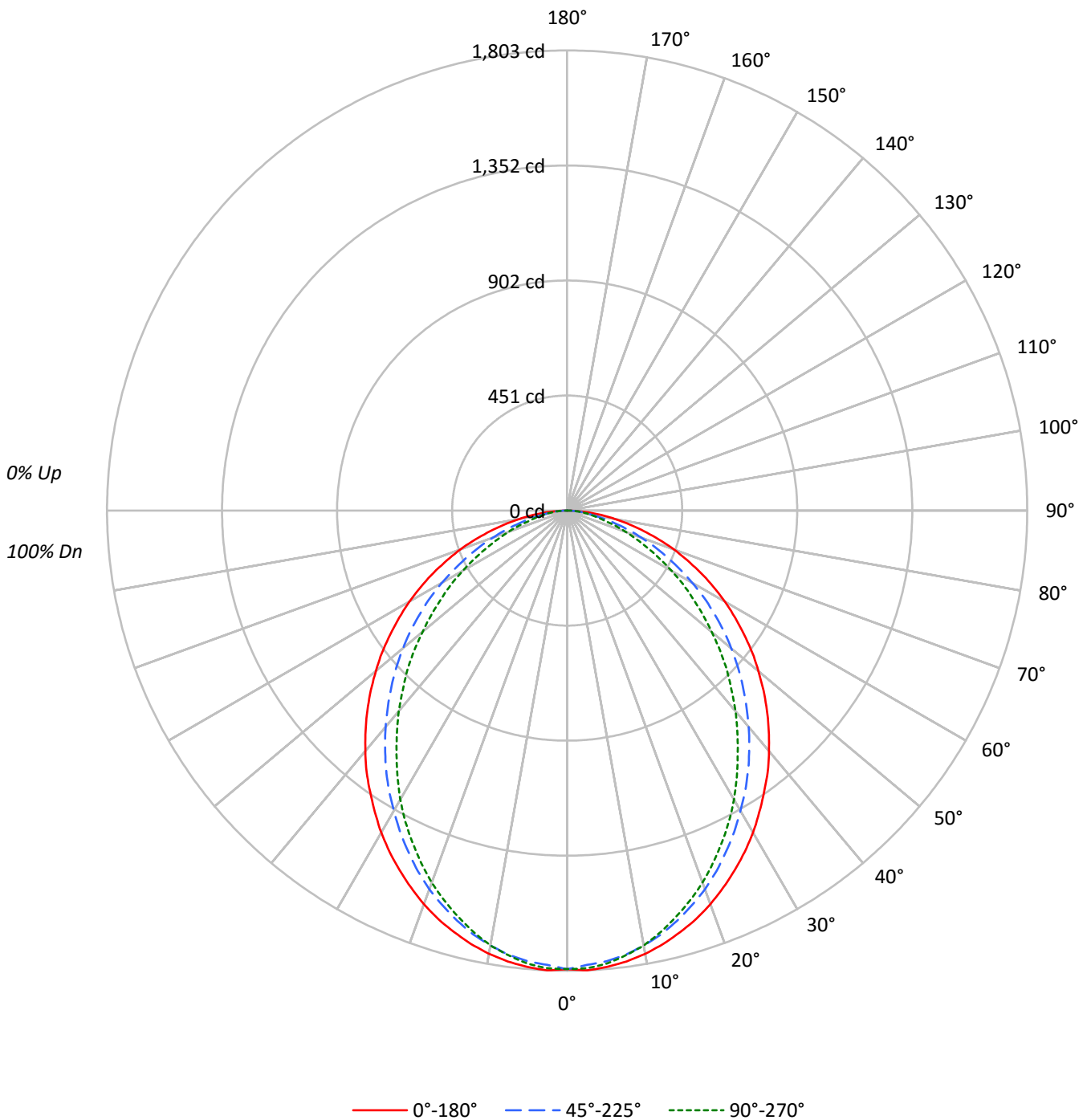
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	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	34	33
9	58	45	37	32	57	45	37	32	44	37	32	42	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°	15969	15969	15969
5°	16017	15817	15900
10°	15916	15617	15617
15°	15739	15312	15166
20°	15526	14936	14673
25°	15239	14460	14069
30°	14955	13934	13417
35°	14603	13423	12646
40°	14276	12845	11908
45°	13916	12233	11133
50°	13530	11605	10230
55°	13109	10890	9328
60°	12704	10064	8391
65°	12157	9090	7334
70°	11578	8028	6375
75°	10702	6694	5189
80°	9772	5226	4750
85°	8659	5008	4732



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.0	4.0
10°-20°	471.8	11.1
20°-30°	684.2	16.2
30°-40°	779.8	18.4
40°-50°	758.7	17.9
50°-60°	637.4	15.0
60°-70°	444.0	10.5
70°-80°	229.3	5.4
80°-90°	62.0	1.5
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°	1324.9	31.3
0°-40°	2104.8	49.7
0°-60°	3500.9	82.6
0°-90°	4236.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4236.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1796	1796	1796	1796	1796	
5°	1795	1790	1773	1786	1782	170
15°	1710	1697	1664	1661	1648	482
25°	1554	1525	1474	1453	1434	716
35°	1346	1305	1237	1191	1165	843
45°	1107	1054	973	911	886	854
55°	846	792	703	631	602	757
65°	578	522	432	370	349	572
75°	312	264	195	163	151	332
85°	85	54	49	46	46	97
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1796.5	1796.5	1796.5	1796.5	1796.5
2.5°	1803.1	1797.8	1781.9	1796.5	1795.1
5°	1795.1	1789.8	1772.6	1785.8	1781.9
7.5°	1781.9	1775.2	1755.4	1764.6	1758.0
10°	1763.3	1756.7	1730.2	1736.8	1730.2
12.5°	1739.4	1730.2	1701.0	1702.3	1691.7
15°	1710.3	1697.0	1663.9	1661.2	1648.0
17.5°	1678.5	1661.2	1622.8	1616.1	1601.6
20°	1641.3	1620.1	1579.0	1564.4	1551.2
22.5°	1598.9	1573.7	1528.6	1511.4	1494.2
25°	1553.8	1524.7	1474.3	1453.1	1434.5
27.5°	1507.4	1473.0	1418.6	1392.1	1373.5
30°	1457.0	1417.3	1357.6	1327.1	1307.2
32.5°	1401.4	1361.6	1299.3	1262.2	1237.0
35°	1345.7	1304.6	1237.0	1190.6	1165.4
37.5°	1291.3	1244.9	1172.0	1124.3	1095.1
40°	1230.3	1181.3	1107.0	1052.7	1026.2
42.5°	1169.4	1119.0	1039.4	982.4	953.2
45°	1107.0	1054.0	973.1	910.8	885.6
47.5°	1043.4	990.4	906.8	841.9	812.7
50°	978.4	925.4	839.2	767.6	739.8
52.5°	914.8	859.1	772.9	700.0	670.9
55°	845.9	791.5	702.7	631.1	601.9
57.5°	779.6	722.6	636.4	563.5	539.6
60°	714.6	657.6	566.1	495.8	472.0
62.5°	645.7	588.7	498.5	430.9	409.7
65°	578.0	522.4	432.2	369.9	348.7
67.5°	509.1	458.7	371.2	311.6	294.3
70°	445.5	388.5	308.9	257.2	245.3
72.5°	377.9	327.5	250.6	208.1	198.9
75°	311.6	263.8	194.9	163.1	151.1
77.5°	250.6	204.2	147.2	120.6	120.6
80°	190.9	149.8	102.1	95.5	92.8
82.5°	135.2	96.8	75.6	70.3	68.9
85°	84.9	54.4	49.1	46.4	46.4
87.5°	41.1	25.2	25.2	23.9	23.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)