

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: P243575

Luminaire Tested: **S124RDR-H1195D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243575
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-H1195D840-X4F0-XX-UDD-F-W
Description: DEFINE 4 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4538.8 lumens
Efficiency: N/A
Efficacy: 120.4 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

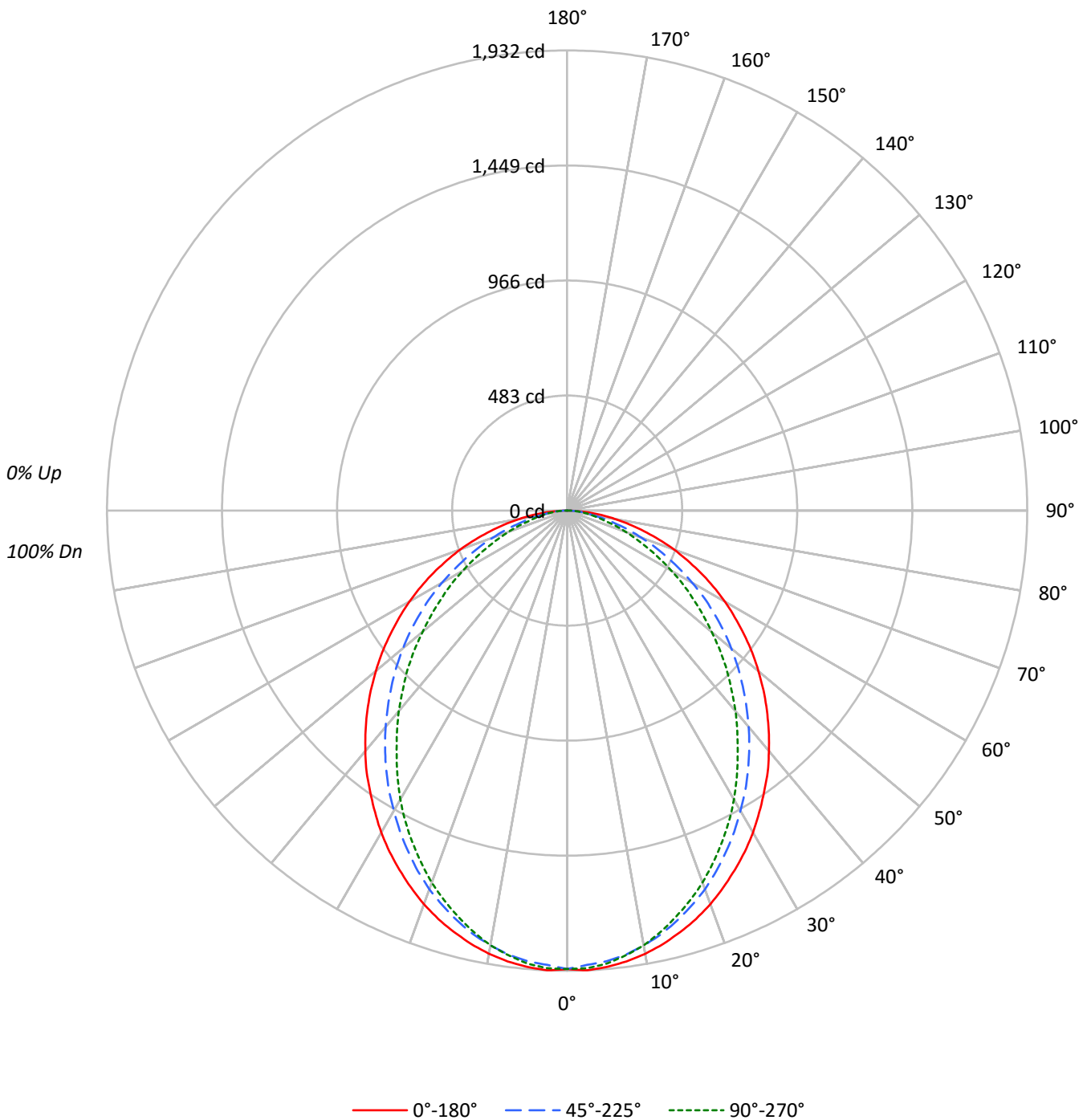
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	17109	17109	17109
5°	17161	16946	17035
10°	17053	16732	16732
15°	16863	16405	16249
20°	16635	16003	15721
25°	16328	15492	15075
30°	16023	14930	14376
35°	15645	14381	13549
40°	15296	13763	12758
45°	14910	13106	11928
50°	14497	12435	10961
55°	14045	11668	9994
60°	13611	10784	8990
65°	13026	9740	7858
70°	12405	8603	6830
75°	11464	7171	5560
80°	10473	5600	5088
85°	9271	5365	5069



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	4.0
10°-20°	505.5	11.1
20°-30°	733.1	16.2
30°-40°	835.5	18.4
40°-50°	812.9	17.9
50°-60°	682.9	15.0
60°-70°	475.8	10.5
70°-80°	245.7	5.4
80°-90°	66.4	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°	1419.6	31.3
0°-40°	2255.1	49.7
0°-60°	3750.9	82.6
0°-90°	4538.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4538.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1925	1925	1925	1925	1925	
5°	1923	1918	1899	1913	1909	182
15°	1832	1818	1783	1780	1766	517
25°	1665	1634	1580	1557	1537	767
35°	1442	1398	1325	1276	1249	903
45°	1186	1129	1043	976	949	915
55°	906	848	753	676	645	811
65°	619	560	463	396	374	613
75°	334	283	209	175	162	355
85°	91	58	53	50	50	104
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1924.8	1924.8	1924.8	1924.8	1924.8
2.5°	1931.9	1926.2	1909.1	1924.8	1923.3
5°	1923.3	1917.7	1899.2	1913.4	1909.1
7.5°	1909.1	1902.0	1880.7	1890.7	1883.6
10°	1889.3	1882.2	1853.7	1860.8	1853.7
12.5°	1863.7	1853.7	1822.5	1823.9	1812.5
15°	1832.4	1818.2	1782.7	1779.9	1765.7
17.5°	1798.3	1779.9	1738.7	1731.6	1716.0
20°	1758.6	1735.8	1691.8	1676.2	1662.0
22.5°	1713.1	1686.1	1637.8	1619.4	1600.9
25°	1664.8	1633.6	1579.6	1556.9	1537.0
27.5°	1615.1	1578.2	1519.9	1491.5	1471.6
30°	1561.1	1518.5	1454.6	1421.9	1400.6
32.5°	1501.5	1458.8	1392.1	1352.3	1325.3
35°	1441.8	1397.8	1325.3	1275.6	1248.6
37.5°	1383.6	1333.8	1255.7	1204.6	1173.3
40°	1318.2	1265.7	1186.1	1127.9	1099.5
42.5°	1252.9	1198.9	1113.7	1052.6	1021.3
45°	1186.1	1129.3	1042.6	975.9	948.9
47.5°	1117.9	1061.1	971.6	902.0	870.8
50°	1048.3	991.5	899.2	822.5	792.6
52.5°	980.1	920.5	828.1	750.0	718.8
55°	906.3	848.0	752.9	676.2	644.9
57.5°	835.2	774.2	681.8	603.7	578.1
60°	765.6	704.6	606.6	531.3	505.7
62.5°	691.8	630.7	534.1	461.7	438.9
65°	619.3	559.7	463.1	396.3	373.6
67.5°	545.5	491.5	397.7	333.8	315.3
70°	477.3	416.2	331.0	275.6	262.8
72.5°	404.8	350.9	268.5	223.0	213.1
75°	333.8	282.7	208.8	174.7	161.9
77.5°	268.5	218.8	157.7	129.3	129.3
80°	204.6	160.5	109.4	102.3	99.4
82.5°	144.9	103.7	81.0	75.3	73.9
85°	90.9	58.2	52.6	49.7	49.7
87.5°	44.0	27.0	27.0	25.6	25.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)