

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: P242612

Luminaire Tested: **S124DR-S1195D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242612
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-5)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DR-S1195D840-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4794.3 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')
CIE Type: Direct

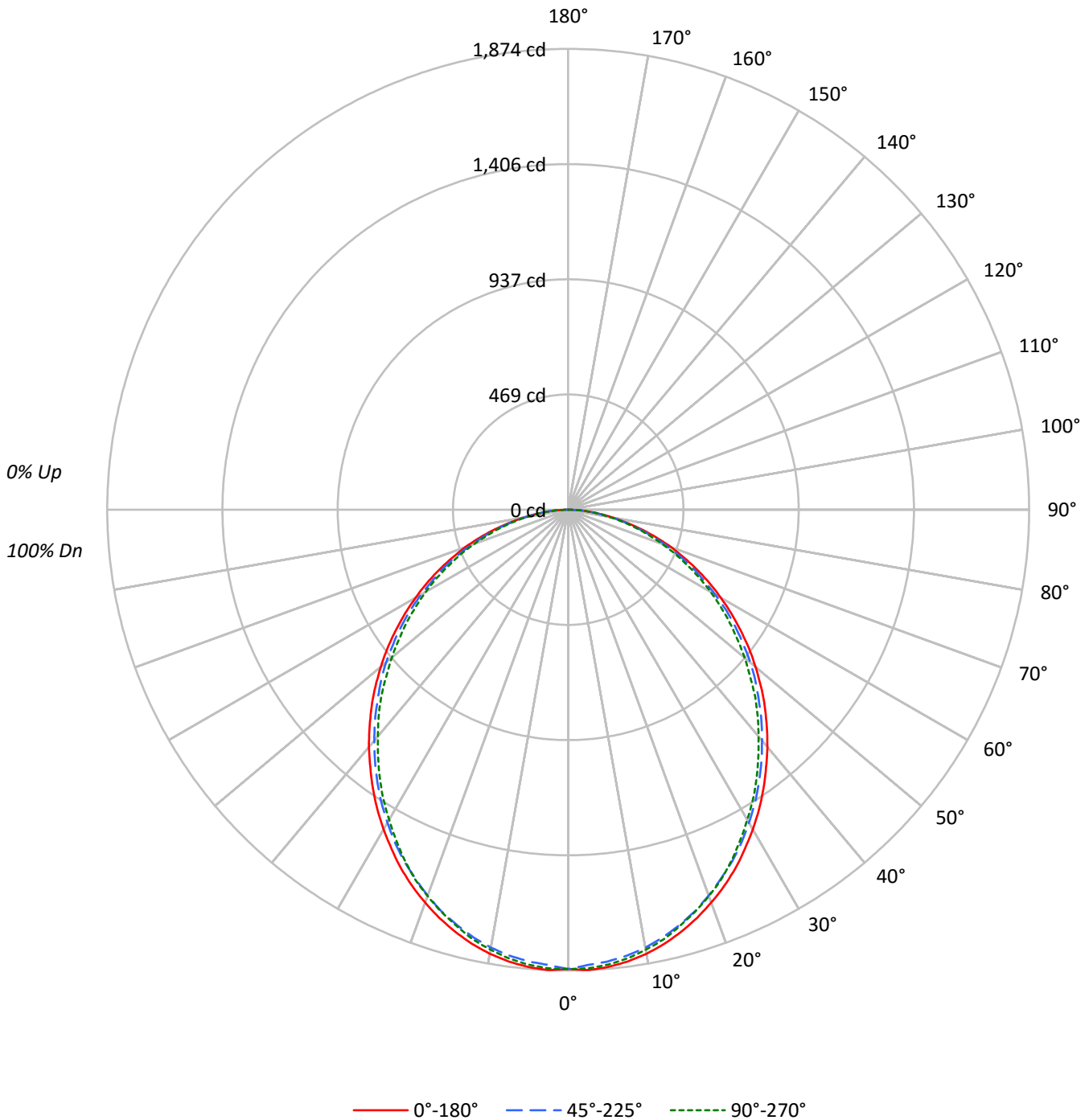
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39
7	66	52	44	38	64	52	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16604	16604	16604
5°	16654	16453	16573
10°	16549	16319	16400
15°	16349	16087	16128
20°	16084	15800	15814
25°	15781	15472	15428
30°	15408	15086	14948
35°	15023	14682	14488
40°	14623	14224	13963
45°	14205	13773	13509
50°	13743	13371	12956
55°	13244	12850	12432
60°	12745	12267	11893
65°	12182	11711	11238
70°	11552	10970	10541
75°	10588	10077	9819
80°	9424	9040	8810
85°	8241	7935	7782



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.1	3.7
10°-20°	496.0	10.3
20°-30°	730.0	15.2
30°-40°	848.6	17.7
40°-50°	848.5	17.7
50°-60°	742.1	15.5
60°-70°	551.0	11.5
70°-80°	312.6	6.5
80°-90°	89.5	1.9
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°	1402.0	29.2
0°-40°	2250.6	46.9
0°-60°	3841.2	80.1
0°-90°	4794.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4794.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1868	1868	1868	1868	1868	
5°	1866	1860	1844	1860	1857	177
15°	1777	1771	1748	1757	1753	501
25°	1609	1598	1578	1579	1573	740
35°	1384	1374	1353	1342	1335	866
45°	1130	1120	1096	1079	1075	871
55°	855	850	829	811	802	766
65°	579	572	557	542	534	573
75°	308	301	293	287	286	327
85°	81	81	78	78	76	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1867.9	1867.9	1867.9	1867.9	1867.9
2.5°	1873.9	1869.4	1852.9	1867.9	1866.4
5°	1866.4	1860.4	1843.9	1860.4	1857.4
7.5°	1852.9	1846.9	1829.0	1842.4	1840.9
10°	1833.5	1827.5	1808.0	1820.0	1817.0
12.5°	1808.0	1802.0	1781.1	1794.5	1790.1
15°	1776.6	1770.6	1748.1	1757.1	1752.6
17.5°	1740.7	1733.2	1712.2	1718.2	1715.2
20°	1700.3	1692.8	1670.3	1674.8	1671.8
22.5°	1656.8	1646.4	1623.9	1632.9	1626.9
25°	1609.0	1598.5	1577.5	1579.0	1573.0
27.5°	1555.1	1544.6	1525.1	1522.1	1514.7
30°	1501.2	1489.2	1469.8	1463.8	1456.3
32.5°	1444.3	1433.8	1412.9	1405.4	1397.9
35°	1384.4	1374.0	1353.0	1342.5	1335.1
37.5°	1321.6	1312.6	1290.2	1279.7	1269.2
40°	1260.2	1248.2	1225.8	1210.8	1203.3
42.5°	1194.4	1188.4	1162.9	1145.0	1140.5
45°	1130.0	1119.5	1095.6	1079.1	1074.6
47.5°	1062.7	1055.2	1032.7	1014.8	1002.8
50°	993.8	987.8	966.9	945.9	936.9
52.5°	926.5	919.0	896.5	878.6	866.6
55°	854.6	850.1	829.2	811.2	802.2
57.5°	787.3	782.8	761.8	743.9	734.9
60°	716.9	709.4	690.0	676.5	669.0
62.5°	648.1	642.1	621.1	609.2	601.7
65°	579.2	571.7	556.8	541.8	534.3
67.5°	508.9	502.9	487.9	473.0	471.5
70°	444.5	434.0	422.1	410.1	405.6
72.5°	375.7	365.2	356.2	347.2	342.7
75°	308.3	300.8	293.4	287.4	285.9
77.5°	242.5	239.5	232.0	230.5	226.0
80°	184.1	179.6	176.6	173.6	172.1
82.5°	127.2	125.7	125.7	124.2	122.7
85°	80.8	80.8	77.8	77.8	76.3
87.5°	38.9	37.4	35.9	35.9	35.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)