

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: P242607

Luminaire Tested: **S124DR-S1195D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242607
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-S1195D835-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4747.5 lumens
Efficiency: N/A
Efficacy: 115.5 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

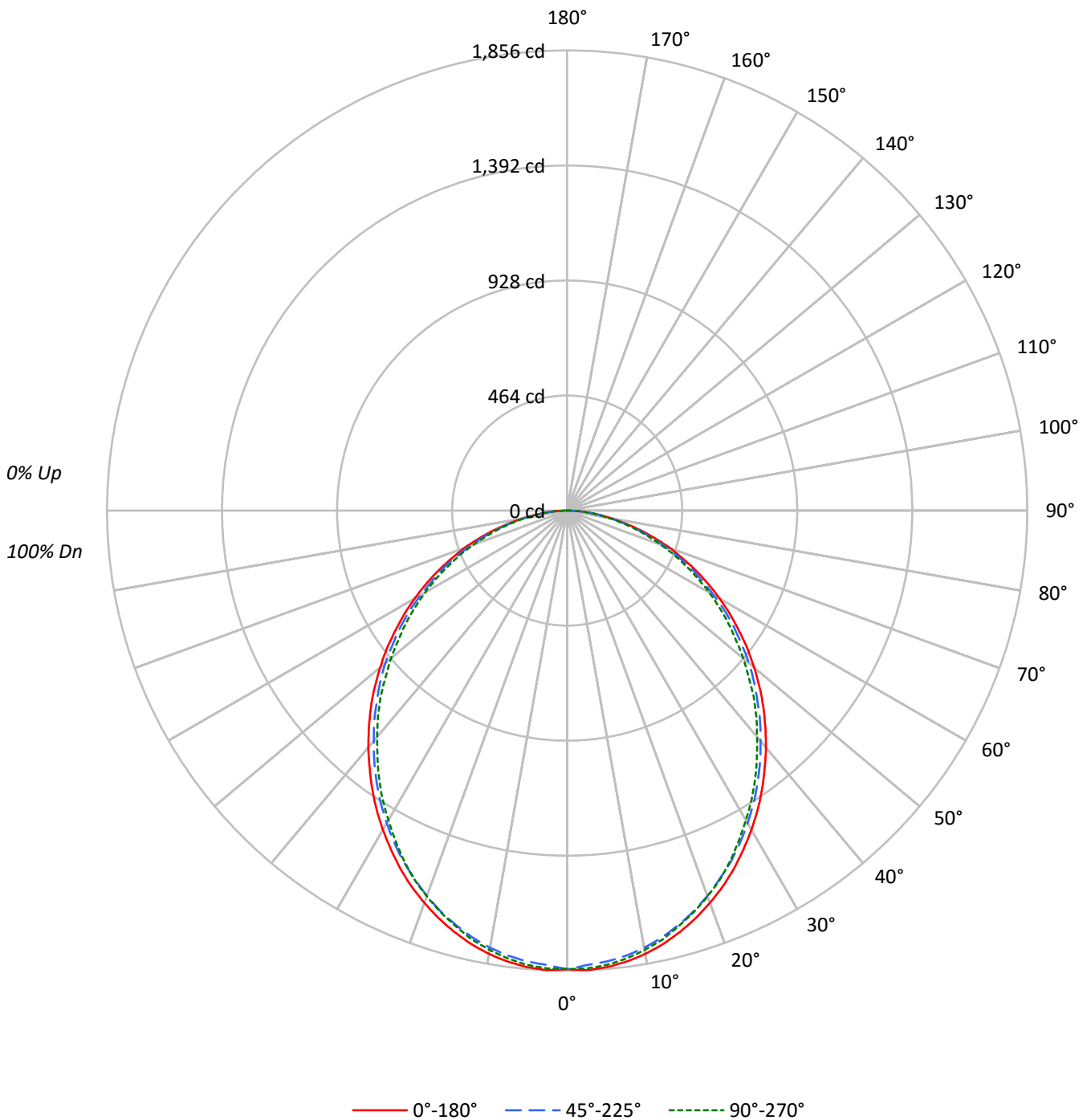
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	16441	16441	16441
5°	16491	16292	16412
10°	16387	16160	16240
15°	16189	15930	15971
20°	15926	15646	15660
25°	15626	15321	15278
30°	15257	14938	14802
35°	14876	14539	14345
40°	14480	14085	13827
45°	14067	13638	13377
50°	13609	13240	12830
55°	13115	12725	12311
60°	12620	12146	11778
65°	12065	11595	11129
70°	11441	10861	10437
75°	10485	9977	9723
80°	9332	8953	8723
85°	8159	7863	7710



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.3	3.7
10°-20°	491.2	10.3
20°-30°	722.9	15.2
30°-40°	840.3	17.7
40°-50°	840.2	17.7
50°-60°	734.9	15.5
60°-70°	545.6	11.5
70°-80°	309.5	6.5
80°-90°	88.7	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°	1388.3	29.2
0°-40°	2228.6	46.9
0°-60°	3803.7	80.1
0°-90°	4747.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4747.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1850	1850	1850	1850	1850	
5°	1848	1842	1826	1842	1839	175
15°	1759	1753	1731	1740	1736	496
25°	1593	1583	1562	1564	1558	733
35°	1371	1360	1340	1329	1322	857
45°	1119	1109	1085	1069	1064	863
55°	846	842	821	803	794	758
65°	574	566	551	536	529	568
75°	305	298	290	285	283	324
85°	80	80	77	77	76	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1849.6	1849.6	1849.6	1849.6	1849.6
2.5°	1855.6	1851.1	1834.8	1849.6	1848.2
5°	1848.2	1842.2	1825.9	1842.2	1839.3
7.5°	1834.8	1828.9	1811.1	1824.4	1823.0
10°	1815.5	1809.6	1790.4	1802.2	1799.2
12.5°	1790.4	1784.4	1763.7	1777.0	1772.6
15°	1759.2	1753.3	1731.1	1740.0	1735.5
17.5°	1723.7	1716.2	1695.5	1701.4	1698.5
20°	1683.6	1676.2	1654.0	1658.4	1655.5
22.5°	1640.7	1630.3	1608.1	1616.9	1611.0
25°	1593.2	1582.9	1562.1	1563.6	1557.7
27.5°	1539.9	1529.5	1510.2	1507.3	1499.9
30°	1486.5	1474.7	1455.4	1449.5	1442.1
32.5°	1430.2	1419.8	1399.1	1391.7	1384.3
35°	1370.9	1360.5	1339.8	1329.4	1322.0
37.5°	1308.7	1299.8	1277.6	1267.2	1256.8
40°	1247.9	1236.1	1213.8	1199.0	1191.6
42.5°	1182.7	1176.8	1151.6	1133.8	1129.3
45°	1119.0	1108.6	1084.9	1068.6	1064.1
47.5°	1052.3	1044.9	1022.6	1004.9	993.0
50°	984.1	978.2	957.4	936.7	927.8
52.5°	917.4	910.0	887.8	870.0	858.1
55°	846.3	841.8	821.1	803.3	794.4
57.5°	779.6	775.1	754.4	736.6	727.7
60°	709.9	702.5	683.2	669.9	662.5
62.5°	641.7	635.8	615.1	603.2	595.8
65°	573.6	566.2	551.3	536.5	529.1
67.5°	503.9	498.0	483.2	468.3	466.9
70°	440.2	429.8	417.9	406.1	401.6
72.5°	372.0	361.6	352.7	343.8	339.4
75°	305.3	297.9	290.5	284.6	283.1
77.5°	240.1	237.1	229.7	228.2	223.8
80°	182.3	177.8	174.9	171.9	170.4
82.5°	126.0	124.5	124.5	123.0	121.5
85°	80.0	80.0	77.1	77.1	75.6
87.5°	38.5	37.1	35.6	35.6	35.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)