

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: P243463

Luminaire Tested: **S124DR-H1195D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243463
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-84)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DR-H1195D830-X4F0-XX-UDD-F-W
Description: DEFINE 4 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: 4492.6 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')
CIE Type: Direct

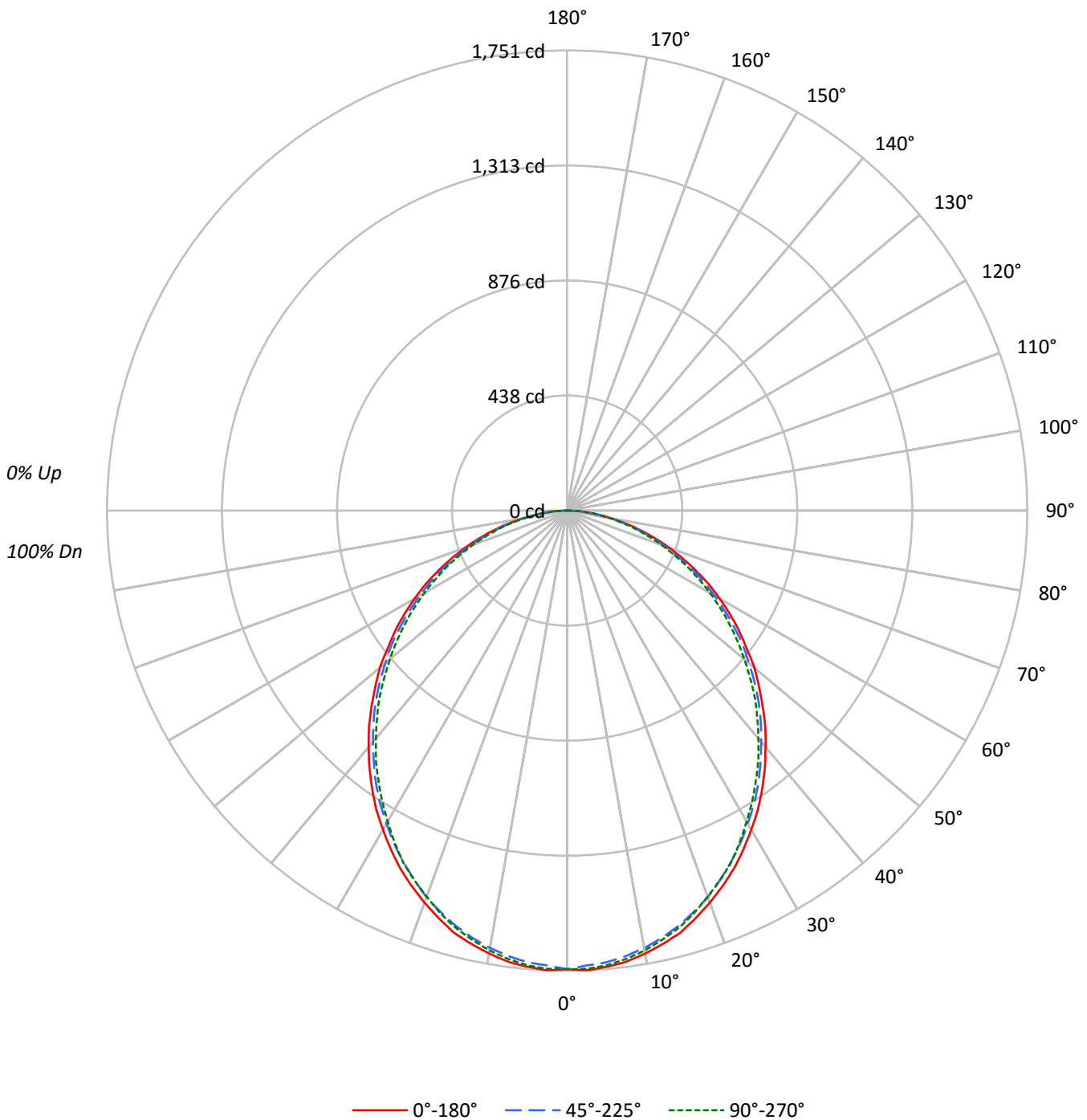
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	46	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	48	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	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	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15512	15512	15512
5°	15546	15395	15495
10°	15444	15252	15342
15°	15302	15053	15119
20°	15017	14802	14789
25°	14734	14469	14484
30°	14385	14108	14021
35°	14037	13760	13590
40°	13626	13330	13132
45°	13227	12959	12709
50°	12862	12489	12175
55°	12389	12058	11685
60°	11915	11511	11157
65°	11349	10960	10603
70°	10739	10261	9928
75°	9901	9510	9218
80°	8723	8579	8359
85°	7680	7680	7527



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.5	3.7
10°-20°	463.9	10.3
20°-30°	683.2	15.2
30°-40°	794.8	17.7
40°-50°	795.2	17.7
50°-60°	695.4	15.5
60°-70°	516.5	11.5
70°-80°	294.3	6.6
80°-90°	84.8	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°	1311.6	29.2
0°-40°	2106.4	46.9
0°-60°	3597.0	80.1
0°-90°	4492.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4492.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1745	1745	1745	1745	1745	
5°	1742	1740	1725	1738	1737	165
15°	1663	1654	1636	1646	1643	468
25°	1502	1495	1475	1480	1477	691
35°	1294	1282	1268	1257	1252	809
45°	1052	1048	1031	1015	1011	813
55°	799	794	778	761	754	715
65°	540	535	521	510	504	536
75°	288	283	277	271	268	306
85°	75	74	75	72	74	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1745.1	1745.1	1745.1	1745.1	1745.1
2.5°	1750.8	1746.6	1732.4	1746.6	1745.1
5°	1742.3	1739.5	1725.3	1738.0	1736.6
7.5°	1730.9	1725.3	1709.6	1722.4	1721.0
10°	1711.1	1706.8	1689.8	1702.5	1699.7
12.5°	1688.3	1684.1	1665.6	1675.6	1672.7
15°	1662.8	1654.3	1635.8	1645.7	1642.9
17.5°	1625.9	1620.2	1601.7	1610.2	1606.0
20°	1587.5	1580.4	1564.8	1566.2	1563.4
22.5°	1546.3	1539.2	1520.8	1526.5	1520.8
25°	1502.3	1495.2	1475.3	1479.6	1476.8
27.5°	1452.6	1445.5	1427.1	1428.5	1422.8
30°	1401.5	1393.0	1374.5	1373.1	1366.0
32.5°	1350.4	1341.9	1323.4	1317.7	1310.6
35°	1293.6	1282.2	1268.0	1256.7	1252.4
37.5°	1235.4	1229.7	1208.4	1201.3	1195.6
40°	1174.3	1168.6	1148.8	1138.8	1131.7
42.5°	1116.1	1109.0	1090.5	1076.3	1070.7
45°	1052.2	1047.9	1030.9	1015.3	1011.0
47.5°	989.7	988.3	967.0	951.4	944.3
50°	930.1	921.6	903.1	888.9	880.4
52.5°	860.5	859.1	843.5	825.0	817.9
55°	799.4	793.8	778.1	761.1	754.0
57.5°	735.5	732.7	712.8	698.6	691.5
60°	670.2	664.5	647.5	634.7	627.6
62.5°	607.7	600.6	585.0	572.2	565.1
65°	539.6	535.3	521.1	509.8	504.1
67.5°	475.7	470.0	455.8	445.9	440.2
70°	413.2	404.7	394.8	386.2	382.0
72.5°	350.7	343.6	335.1	329.4	323.8
75°	288.3	282.6	276.9	271.2	268.4
77.5°	228.6	222.9	220.1	218.7	215.8
80°	170.4	167.6	167.6	166.1	163.3
82.5°	120.7	117.9	117.9	117.9	116.4
85°	75.3	73.8	75.3	72.4	73.8
87.5°	35.5	35.5	36.9	35.5	36.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)