

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: P242603

Luminaire Tested: **S124DR-S1195D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242603
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-S1195D830-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4474.6 lumens
Efficiency: N/A
Efficacy: 108.9 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

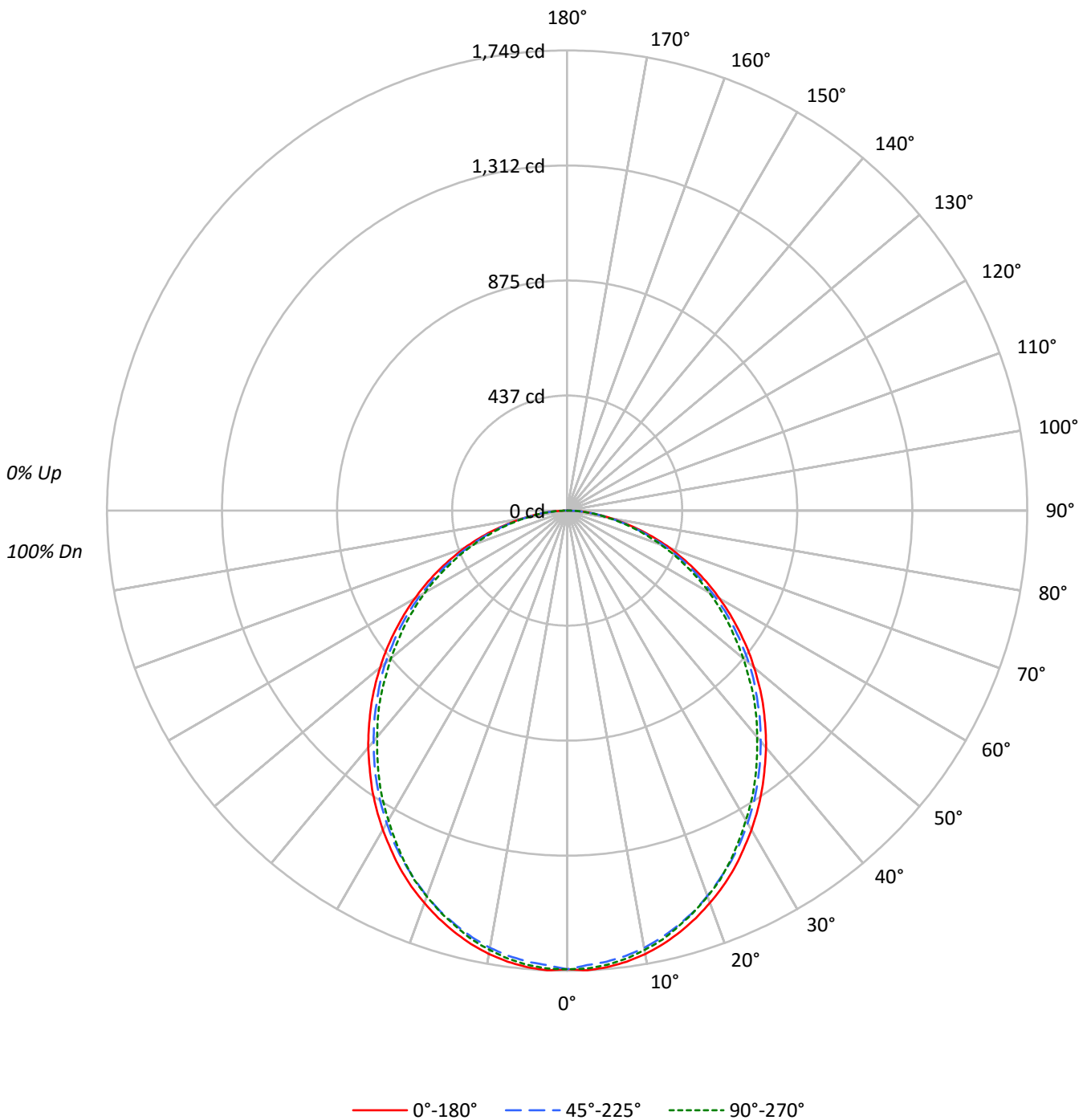
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	15497	15497	15497
5°	15544	15356	15469
10°	15445	15231	15307
15°	15259	15015	15053
20°	15011	14747	14760
25°	14728	14441	14400
30°	14381	14080	13951
35°	14022	13703	13522
40°	13648	13276	13032
45°	13258	12854	12609
50°	12827	12479	12093
55°	12361	11993	11604
60°	11895	11449	11100
65°	11370	10931	10489
70°	10783	10237	9840
75°	9884	9403	9163
80°	8794	8436	8221
85°	7690	7404	7262



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.3	3.7
10°-20°	462.9	10.3
20°-30°	681.3	15.2
30°-40°	792.0	17.7
40°-50°	791.9	17.7
50°-60°	692.6	15.5
60°-70°	514.2	11.5
70°-80°	291.8	6.5
80°-90°	83.5	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°	1308.6	29.2
0°-40°	2100.6	46.9
0°-60°	3585.1	80.1
0°-90°	4474.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4474.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1743	1743	1743	1743	1743	
5°	1742	1736	1721	1736	1734	165
15°	1658	1653	1632	1640	1636	467
25°	1502	1492	1472	1474	1468	691
35°	1292	1282	1263	1253	1246	808
45°	1055	1045	1022	1007	1003	813
55°	798	794	774	757	749	714
65°	541	534	520	506	499	535
75°	288	281	274	268	267	305
85°	75	75	73	73	71	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1743.4	1743.4	1743.4	1743.4	1743.4
2.5°	1748.9	1744.8	1729.4	1743.4	1742.0
5°	1742.0	1736.4	1721.0	1736.4	1733.6
7.5°	1729.4	1723.8	1707.0	1719.6	1718.2
10°	1711.2	1705.6	1687.5	1698.7	1695.9
12.5°	1687.5	1681.9	1662.3	1674.9	1670.7
15°	1658.1	1652.6	1631.6	1640.0	1635.8
17.5°	1624.6	1617.6	1598.1	1603.7	1600.9
20°	1586.9	1579.9	1559.0	1563.2	1560.4
22.5°	1546.4	1536.6	1515.7	1524.0	1518.5
25°	1501.7	1491.9	1472.4	1473.8	1468.2
27.5°	1451.4	1441.6	1423.5	1420.7	1413.7
30°	1401.1	1389.9	1371.8	1366.2	1359.2
32.5°	1348.0	1338.3	1318.7	1311.7	1304.7
35°	1292.2	1282.4	1262.8	1253.0	1246.1
37.5°	1233.5	1225.1	1204.1	1194.4	1184.6
40°	1176.2	1165.0	1144.1	1130.1	1123.1
42.5°	1114.7	1109.2	1085.4	1068.6	1064.5
45°	1054.7	1044.9	1022.5	1007.2	1003.0
47.5°	991.8	984.8	963.9	947.1	935.9
50°	927.6	922.0	902.4	882.9	874.5
52.5°	864.7	857.7	836.8	820.0	808.8
55°	797.6	793.5	773.9	757.1	748.8
57.5°	734.8	730.6	711.0	694.3	685.9
60°	669.1	662.1	644.0	631.4	624.4
62.5°	604.9	599.3	579.7	568.5	561.6
65°	540.6	533.6	519.7	505.7	498.7
67.5°	475.0	469.4	455.4	441.4	440.0
70°	414.9	405.1	393.9	382.8	378.6
72.5°	350.6	340.8	332.5	324.1	319.9
75°	287.8	280.8	273.8	268.2	266.8
77.5°	226.3	223.5	216.5	215.1	210.9
80°	171.8	167.6	164.8	162.0	160.6
82.5°	118.7	117.3	117.3	115.9	114.5
85°	75.4	75.4	72.6	72.6	71.2
87.5°	36.3	34.9	33.5	33.5	33.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)