

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: P243119

Luminaire Tested: **S122DR-H1005D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243119
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-48)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DR-H1005D830-X4F0-XX-UDD-F-W
Description: DEFINE 2 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: 3660.4 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

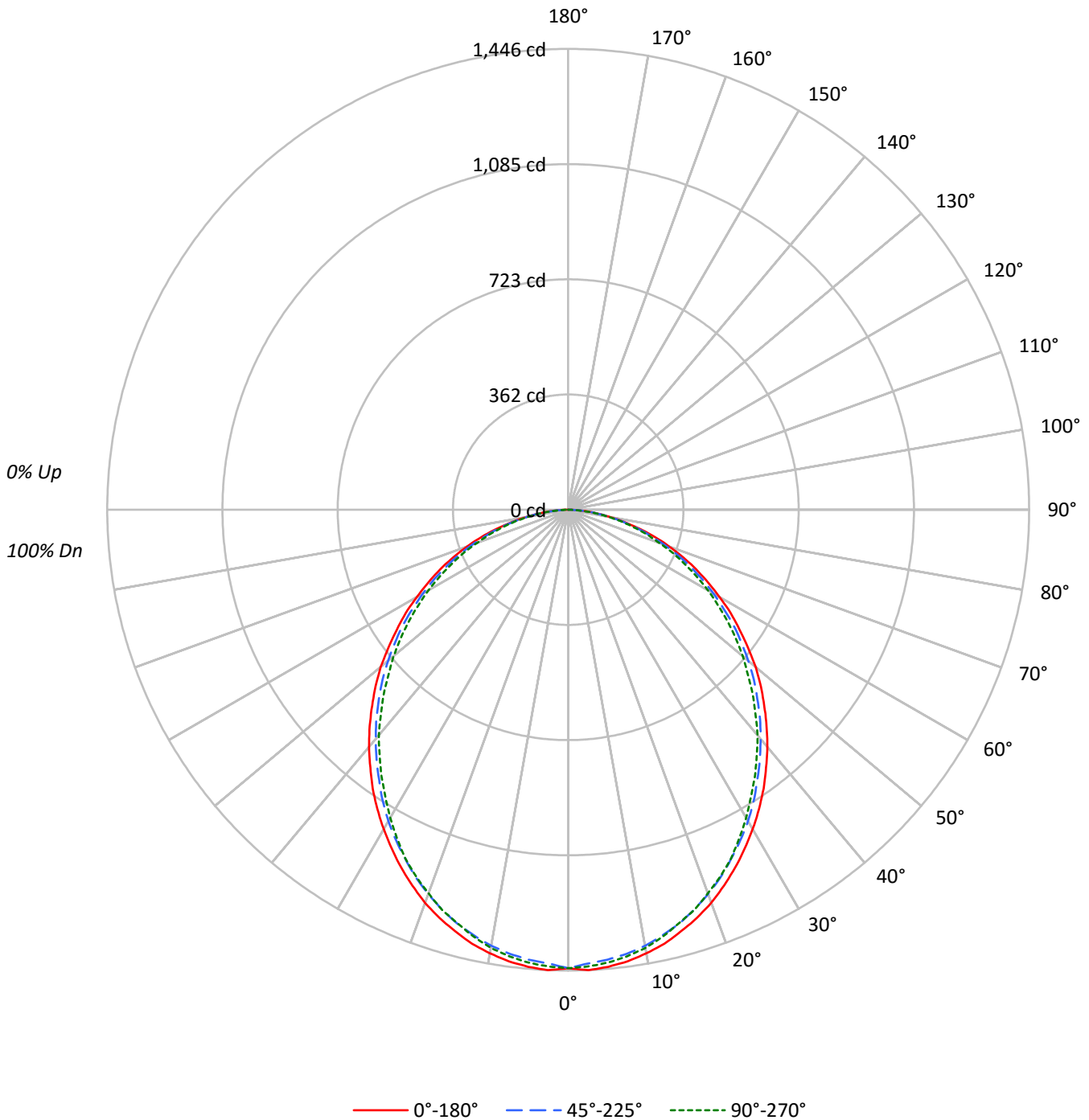
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	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	53	40	33	28	39	32	28	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27400	27400	27400
5°	27530	27099	27277
10°	27335	26873	27003
15°	27006	26511	26483
20°	26605	26015	25960
25°	26052	25411	25384
30°	25456	24816	24552
35°	24848	24046	23739
40°	24164	23341	22978
45°	23428	22606	22035
50°	22746	21842	21176
55°	21795	21044	20254
60°	20861	20050	19295
65°	19957	19002	18163
70°	18757	17794	16908
75°	17074	16390	15609
80°	14830	14402	13821
85°	12741	11299	10425



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.4	3.7
10°-20°	381.3	10.4
20°-30°	560.5	15.3
30°-40°	650.9	17.8
40°-50°	650.0	17.8
50°-60°	566.1	15.5
60°-70°	418.7	11.4
70°-80°	236.0	6.4
80°-90°	61.6	1.7
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°	1077.2	29.4
0°-40°	1728.1	47.2
0°-60°	2944.2	80.4
0°-90°	3660.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3660.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1438	1438	1438	1438	1438	
5°	1440	1433	1417	1429	1427	137
15°	1370	1363	1344	1350	1343	386
25°	1240	1229	1209	1208	1208	571
35°	1069	1057	1034	1025	1021	668
45°	870	860	839	826	818	672
55°	656	651	634	616	610	588
65°	443	436	422	408	403	438
75°	232	231	223	215	212	247
85°	58	56	52	49	48	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1438.5	1438.5	1438.5	1438.5	1438.5
2.5°	1446.4	1439.8	1425.2	1437.2	1434.5
5°	1439.8	1433.2	1417.3	1429.2	1426.6
7.5°	1429.2	1422.6	1405.3	1417.3	1413.3
10°	1413.3	1405.3	1389.4	1397.4	1396.1
12.5°	1394.7	1386.8	1368.2	1374.9	1372.2
15°	1369.5	1362.9	1344.4	1349.7	1343.0
17.5°	1343.0	1332.4	1315.2	1320.5	1316.5
20°	1312.5	1301.9	1283.4	1286.0	1280.7
22.5°	1276.7	1266.1	1248.9	1248.9	1246.2
25°	1239.6	1229.0	1209.1	1207.8	1207.8
27.5°	1198.5	1189.2	1169.4	1165.4	1162.7
30°	1157.4	1149.5	1128.3	1120.3	1116.3
32.5°	1113.7	1103.1	1083.2	1073.9	1067.3
35°	1068.6	1056.7	1034.1	1024.8	1020.9
37.5°	1019.5	1007.6	987.7	979.8	971.8
40°	971.8	961.2	938.7	926.7	924.1
42.5°	921.4	910.8	890.9	877.7	869.7
45°	869.7	860.4	839.2	826.0	818.0
47.5°	819.3	808.7	790.2	774.3	763.7
50°	767.6	757.0	737.1	718.6	714.6
52.5°	710.6	704.0	684.1	666.9	661.6
55°	656.3	651.0	633.7	616.5	609.9
57.5°	604.6	597.9	578.0	564.8	556.8
60°	547.6	543.6	526.3	511.8	506.5
62.5°	494.5	489.2	474.6	460.1	453.4
65°	442.8	436.2	421.6	408.3	403.0
67.5°	389.8	383.2	371.2	360.6	355.3
70°	336.8	331.4	319.5	310.2	303.6
72.5°	285.0	279.7	269.1	259.9	258.5
75°	232.0	230.7	222.7	214.8	212.1
77.5°	183.0	181.6	176.3	172.4	169.7
80°	135.2	135.2	131.3	127.3	126.0
82.5°	92.8	94.1	90.2	87.5	87.5
85°	58.3	55.7	51.7	49.1	47.7
87.5°	23.9	19.9	18.6	14.6	13.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)