

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: P243231

Luminaire Tested: **S122RDR-H1005D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243231
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-63)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDR-H1005D840-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3376.4 lumens
Efficiency: N/A
Efficacy: 89.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

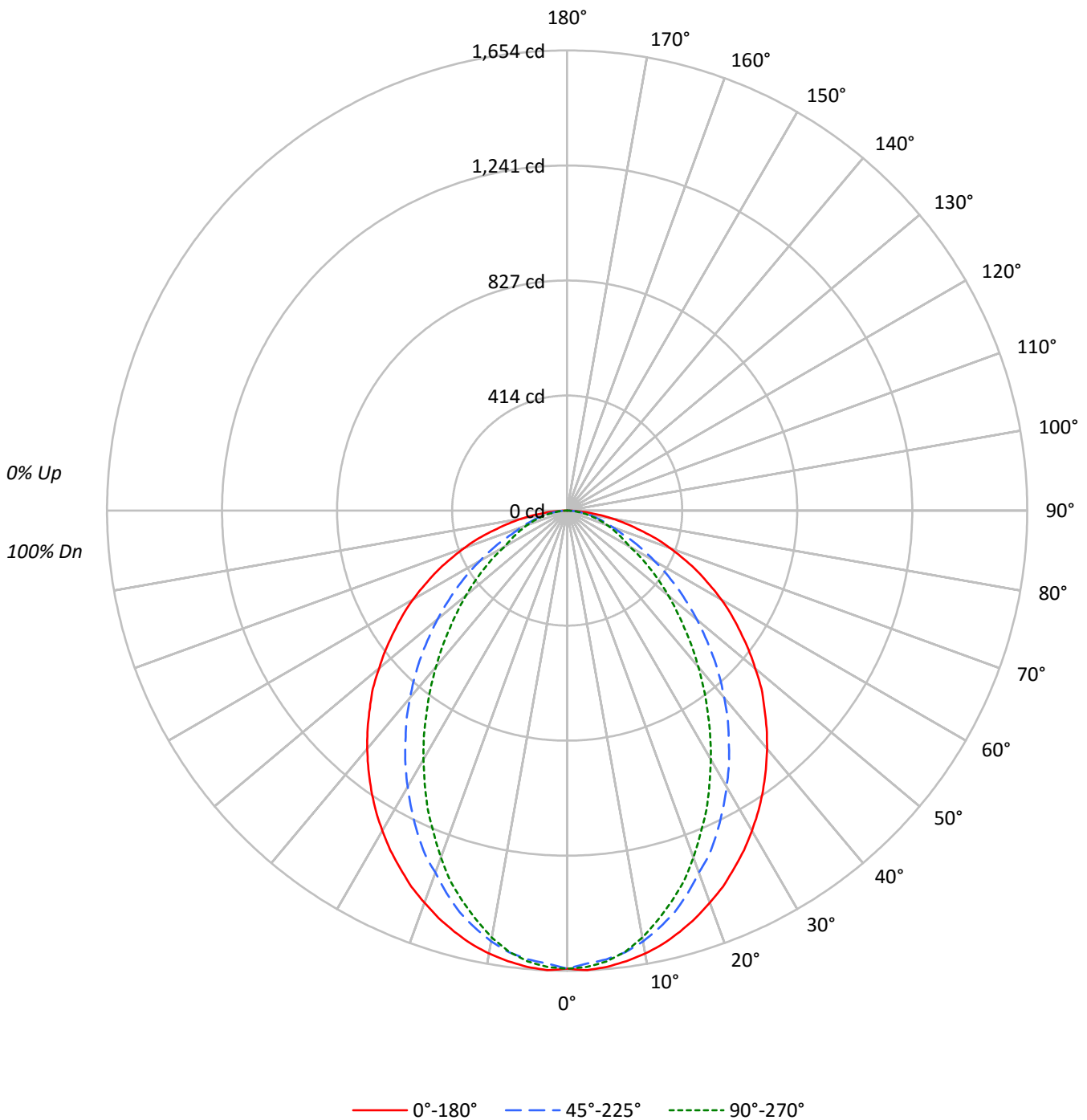
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31360	31360	31360
5°	31480	30964	31099
10°	31266	30415	30140
15°	30897	29469	28657
20°	30405	28074	26892
25°	29825	26809	24899
30°	29213	25212	22714
35°	28538	23551	20446
40°	27797	21829	18226
45°	27016	20012	16033
50°	26139	18017	14058
55°	25239	16040	12124
60°	24404	13798	9905
65°	23306	11651	9154
70°	21915	9651	8543
75°	19966	8780	7838
80°	17924	7788	7009
85°	14905	6513	6207



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.2	4.6
10°-20°	422.6	12.5
20°-30°	592.8	17.6
30°-40°	645.8	19.1
40°-50°	593.6	17.6
50°-60°	465.8	13.8
60°-70°	303.9	9.0
70°-80°	157.1	4.7
80°-90°	40.7	1.2
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°	1169.7	34.6
0°-40°	1815.4	53.8
0°-60°	2874.7	85.1
0°-90°	3376.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3376.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1646	1646	1646	1646	1646	
5°	1646	1638	1619	1631	1626	156
15°	1567	1548	1494	1464	1453	442
25°	1419	1369	1276	1213	1185	654
35°	1227	1146	1013	919	879	768
45°	1003	901	743	635	595	774
55°	760	646	483	392	365	681
65°	517	392	258	210	203	511
75°	271	169	119	109	106	290
85°	68	33	30	28	28	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1646.4	1646.4	1646.4	1646.4	1646.4
2.5°	1653.5	1646.4	1629.3	1644.9	1642.1
5°	1646.4	1637.8	1619.4	1630.7	1626.5
7.5°	1633.6	1625.0	1600.9	1606.6	1599.5
10°	1616.5	1605.2	1572.5	1566.8	1558.3
12.5°	1595.2	1579.6	1535.6	1518.5	1507.1
15°	1566.8	1548.3	1494.4	1464.5	1453.2
17.5°	1535.6	1508.6	1441.8	1407.7	1396.3
20°	1500.0	1468.8	1385.0	1349.5	1326.7
22.5°	1463.1	1423.3	1336.7	1281.3	1254.3
25°	1419.1	1369.4	1275.6	1213.1	1184.7
27.5°	1376.5	1318.2	1211.7	1139.2	1108.0
30°	1328.2	1264.2	1146.3	1062.5	1032.7
32.5°	1279.9	1206.0	1082.4	991.5	957.4
35°	1227.3	1146.3	1012.8	919.1	879.3
37.5°	1173.3	1089.5	948.9	845.2	806.8
40°	1117.9	1024.2	877.9	769.9	733.0
42.5°	1061.1	965.9	811.1	700.3	664.8
45°	1002.9	900.6	742.9	635.0	595.2
47.5°	947.5	836.7	673.3	571.0	532.7
50°	882.1	772.7	608.0	504.3	474.4
52.5°	822.5	708.8	544.0	444.6	419.0
55°	760.0	646.3	483.0	392.1	365.1
57.5°	701.7	581.0	421.9	339.5	313.9
60°	640.6	518.5	362.2	286.9	260.0
62.5°	576.7	454.6	309.7	238.6	230.1
65°	517.1	392.1	258.5	210.2	203.1
67.5°	453.1	333.8	206.0	184.7	177.6
70°	393.5	277.0	173.3	157.7	153.4
72.5°	335.2	223.0	146.3	133.5	129.3
75°	271.3	169.0	119.3	109.4	106.5
77.5°	215.9	119.3	95.2	88.1	85.2
80°	163.4	86.7	71.0	66.8	63.9
82.5°	112.2	58.2	49.7	46.9	45.5
85°	68.2	32.7	29.8	28.4	28.4
87.5°	27.0	12.8	12.8	11.4	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)