

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: P243246

Luminaire Tested: **S122RDR-H1005D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243246
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-H1005D940-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2981.4 lumens
Efficiency: N/A
Efficacy: 79.1 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

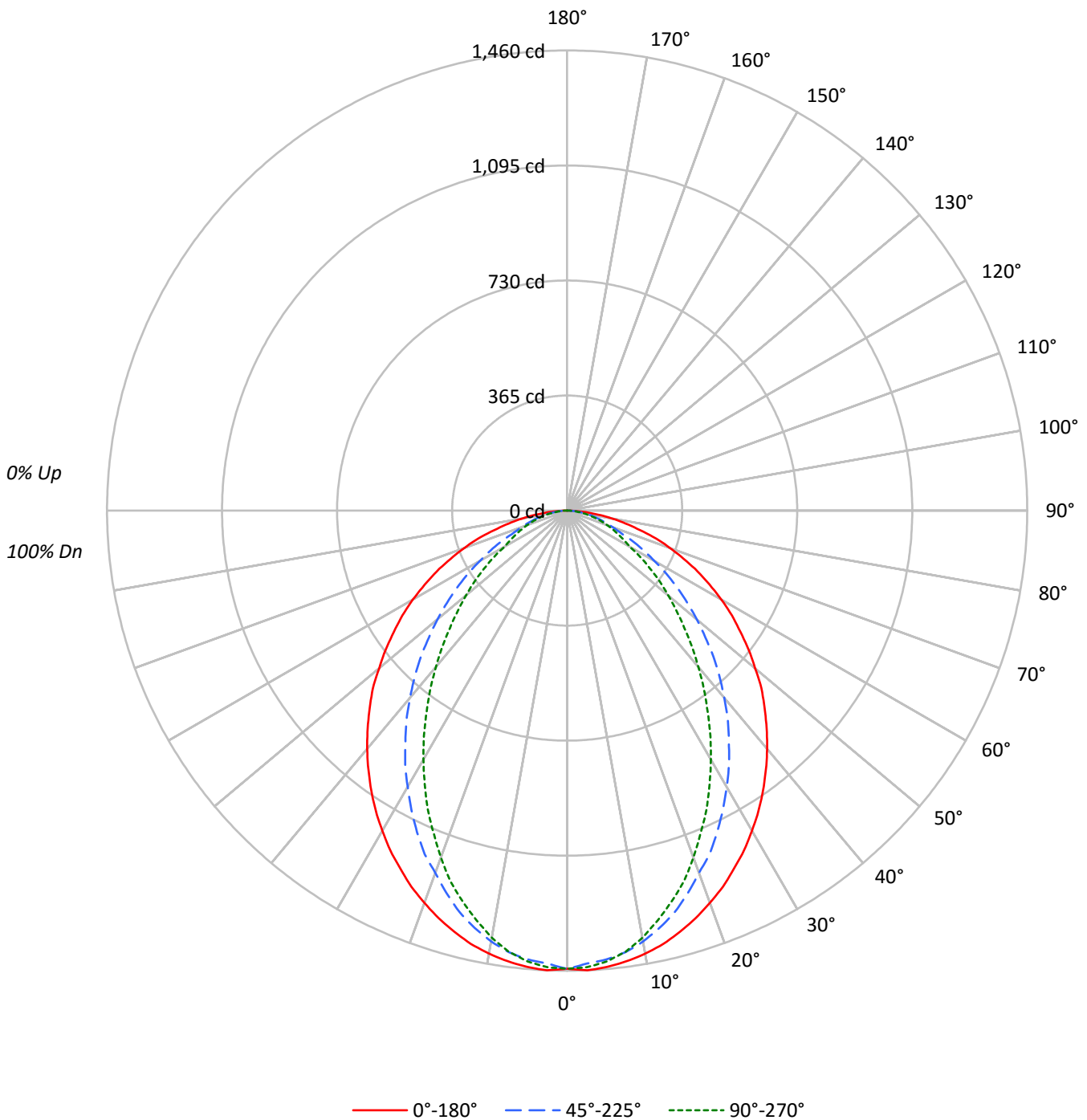
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P243246

CATALOG NUMBER: S122RDR-H1005D940-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P243246

CATALOG NUMBER: S122RDR-H1005D940-X4F0-XX-UDD-F-W

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°	27690	27690	27690
5°	27795	27340	27461
10°	27608	26856	26614
15°	27282	26020	25302
20°	26848	24788	23746
25°	26334	23673	21986
30°	25795	22263	20057
35°	25199	20795	18054
40°	24544	19275	16093
45°	23853	17671	14156
50°	23081	15907	12413
55°	22283	14163	10706
60°	21551	12183	8743
65°	20579	10290	8086
70°	19347	8521	7546
75°	17633	7757	6925
80°	15817	6878	6187
85°	13157	5748	5486



TEST NUMBER: P243246

CATALOG NUMBER: S122RDR-H1005D940-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.2	4.6
10°-20°	373.2	12.5
20°-30°	523.5	17.6
30°-40°	570.2	19.1
40°-50°	524.1	17.6
50°-60°	411.3	13.8
60°-70°	268.3	9.0
70°-80°	138.8	4.7
80°-90°	35.9	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°	1032.8	34.6
0°-40°	1603.0	53.8
0°-60°	2538.4	85.1
0°-90°	2981.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2981.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1454	1454	1454	1454	1454	
5°	1454	1446	1430	1440	1436	138
15°	1384	1367	1320	1293	1283	390
25°	1253	1209	1126	1071	1046	578
35°	1084	1012	894	812	776	678
45°	886	795	656	561	526	684
55°	671	571	426	346	322	601
65°	457	346	228	186	179	451
75°	240	149	105	97	94	256
85°	60	29	26	25	25	69
90°	0	0	0	0	0	



TEST NUMBER: P243246

CATALOG NUMBER: S122RDR-H1005D940-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1453.7	1453.7	1453.7	1453.7	1453.7
2.5°	1460.0	1453.7	1438.7	1452.5	1450.0
5°	1453.7	1446.2	1429.9	1439.9	1436.2
7.5°	1442.4	1434.9	1413.6	1418.6	1412.3
10°	1427.4	1417.4	1388.5	1383.5	1376.0
12.5°	1408.6	1394.8	1355.9	1340.8	1330.8
15°	1383.5	1367.2	1319.5	1293.2	1283.1
17.5°	1355.9	1332.1	1273.1	1243.0	1233.0
20°	1324.5	1296.9	1222.9	1191.6	1171.5
22.5°	1291.9	1256.8	1180.3	1131.4	1107.5
25°	1253.0	1209.1	1126.4	1071.2	1046.1
27.5°	1215.4	1164.0	1069.9	1005.9	978.4
30°	1172.8	1116.3	1012.2	938.2	911.9
32.5°	1130.1	1064.9	955.8	875.5	845.4
35°	1083.7	1012.2	894.3	811.5	776.4
37.5°	1036.0	962.0	837.9	746.3	712.4
40°	987.1	904.3	775.2	679.8	647.2
42.5°	937.0	852.9	716.2	618.4	587.0
45°	885.5	795.2	656.0	560.7	525.5
47.5°	836.6	738.8	594.5	504.2	470.4
50°	778.9	682.3	536.8	445.3	418.9
52.5°	726.2	625.9	480.4	392.6	370.0
55°	671.0	570.7	426.5	346.2	322.4
57.5°	619.6	513.0	372.5	299.8	277.2
60°	565.7	457.8	319.8	253.4	229.5
62.5°	509.2	401.4	273.4	210.7	203.2
65°	456.6	346.2	228.3	185.6	179.4
67.5°	400.1	294.8	181.9	163.1	156.8
70°	347.4	244.6	153.0	139.2	135.5
72.5°	296.0	196.9	129.2	117.9	114.1
75°	239.6	149.3	105.4	96.6	94.1
77.5°	190.7	105.4	84.0	77.8	75.3
80°	144.2	76.5	62.7	59.0	56.4
82.5°	99.1	51.4	43.9	41.4	40.1
85°	60.2	28.8	26.3	25.1	25.1
87.5°	23.8	11.3	11.3	10.0	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)