

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: P242371

Luminaire Tested: **S122RDR-S1005D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242371
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDR-S1005D840-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3401.3 lumens
Efficiency: N/A
Efficacy: 82.8 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

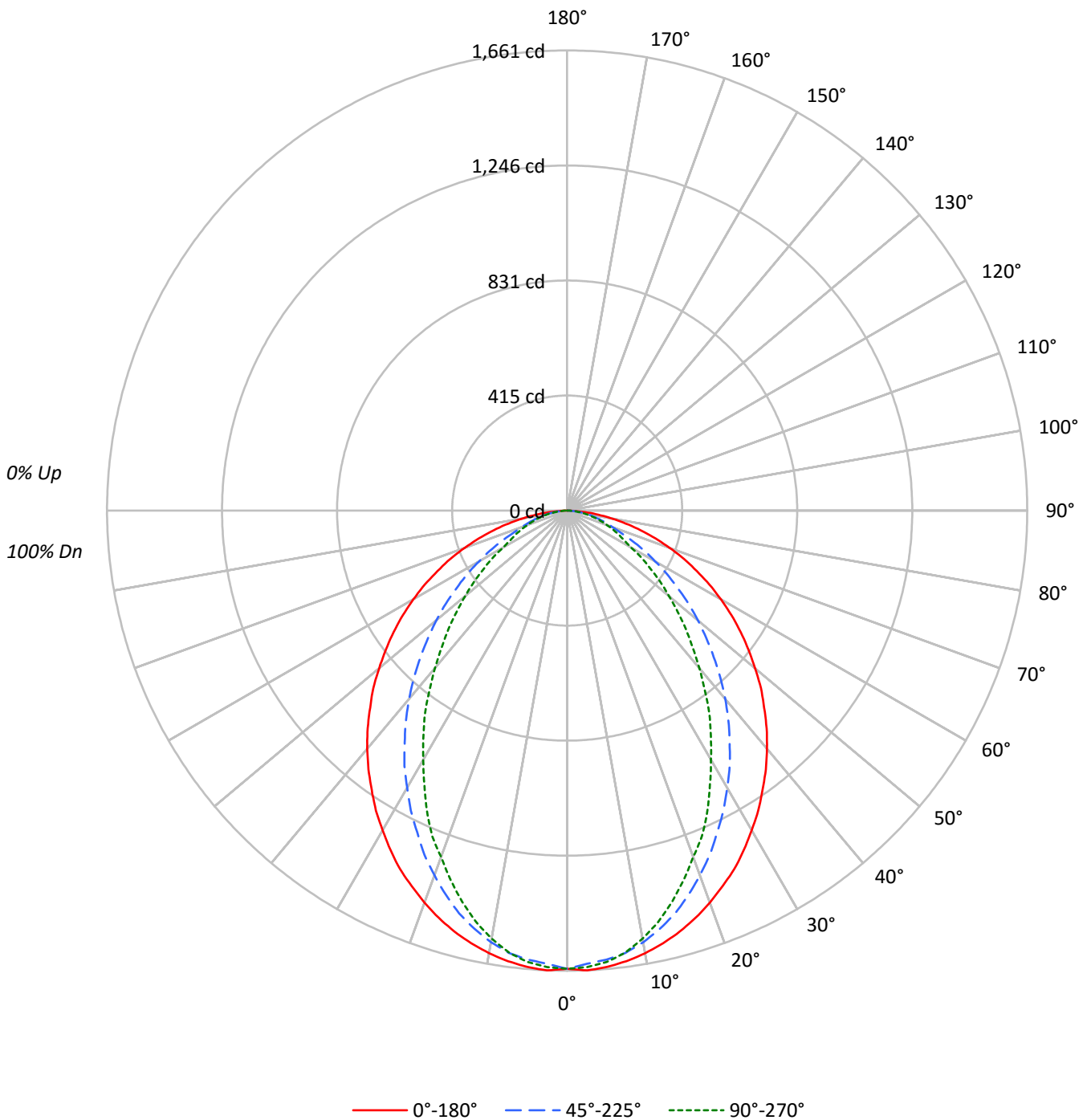
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	78	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°	31501	31501	31501
5°	31621	31107	31279
10°	31380	30598	30337
15°	31019	29692	28836
20°	30521	28396	26971
25°	30008	26927	25166
30°	29299	25412	22846
35°	28608	23769	20811
40°	27911	22068	18460
45°	27094	20157	16330
50°	26255	18227	14236
55°	25398	16153	12227
60°	24404	13970	10149
65°	23275	11736	9239
70°	21920	9668	8504
75°	20268	8809	7934
80°	17891	7876	7229
85°	14074	6207	6207



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.0	4.6
10°-20°	425.5	12.5
20°-30°	597.4	17.6
30°-40°	651.2	19.1
40°-50°	598.5	17.6
50°-60°	470.0	13.8
60°-70°	305.9	9.0
70°-80°	157.5	4.6
80°-90°	40.2	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°	1177.9	34.6
0°-40°	1829.1	53.8
0°-60°	2897.7	85.2
0°-90°	3401.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3401.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1654	1654	1654	1654	1654	
5°	1654	1646	1627	1640	1636	157
15°	1573	1557	1506	1477	1462	443
25°	1428	1380	1281	1220	1197	657
35°	1230	1154	1022	928	895	770
45°	1006	906	748	642	606	777
55°	765	648	486	397	368	683
65°	516	395	260	210	205	512
75°	275	171	120	109	108	291
85°	64	33	28	28	28	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1653.8	1653.8	1653.8	1653.8	1653.8
2.5°	1661.3	1653.8	1637.4	1652.4	1649.4
5°	1653.8	1646.4	1626.9	1640.4	1635.9
7.5°	1640.4	1631.4	1610.4	1616.4	1608.9
10°	1622.4	1611.9	1582.0	1577.5	1568.5
12.5°	1600.0	1586.5	1546.1	1537.1	1520.6
15°	1573.0	1556.6	1505.7	1477.2	1462.3
17.5°	1541.6	1517.6	1454.8	1421.9	1397.9
20°	1505.7	1475.7	1400.9	1363.5	1330.6
22.5°	1466.8	1432.3	1345.5	1294.6	1272.2
25°	1427.8	1380.0	1281.2	1219.8	1197.4
27.5°	1381.4	1330.6	1221.3	1151.0	1116.5
30°	1332.1	1275.2	1155.4	1079.1	1038.7
32.5°	1284.2	1215.3	1092.6	1002.8	965.4
35°	1230.3	1154.0	1022.2	928.0	895.0
37.5°	1177.9	1095.6	956.4	853.1	815.7
40°	1122.5	1032.7	887.5	781.3	742.4
42.5°	1065.6	969.9	818.7	707.9	670.5
45°	1005.8	905.5	748.3	642.1	606.2
47.5°	948.9	842.6	681.0	574.7	541.8
50°	886.0	779.8	615.1	511.9	480.4
52.5°	824.7	712.4	552.3	453.5	425.1
55°	764.8	648.1	486.4	396.6	368.2
57.5°	703.4	583.7	428.1	344.2	320.3
60°	640.6	520.8	366.7	290.4	266.4
62.5°	579.2	459.5	314.3	242.5	230.5
65°	516.4	395.1	260.4	209.5	205.0
67.5°	456.5	335.3	209.5	184.1	179.6
70°	393.6	276.9	173.6	158.6	152.7
72.5°	333.8	223.0	145.2	133.2	130.2
75°	275.4	170.6	119.7	109.3	107.8
77.5°	217.0	121.2	94.3	88.3	85.3
80°	163.1	86.8	71.8	65.9	65.9
82.5°	113.7	58.4	49.4	46.4	46.4
85°	64.4	32.9	28.4	28.4	28.4
87.5°	23.9	12.0	12.0	10.5	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)