

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: P243143

Luminaire Tested: **S122DR-H1005D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243143
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-H1005D940-X4F0-XX-UDD-F-W
Description: DEFINE 2 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: 3463.0 lumens
Efficiency: N/A
Efficacy: 91.9 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

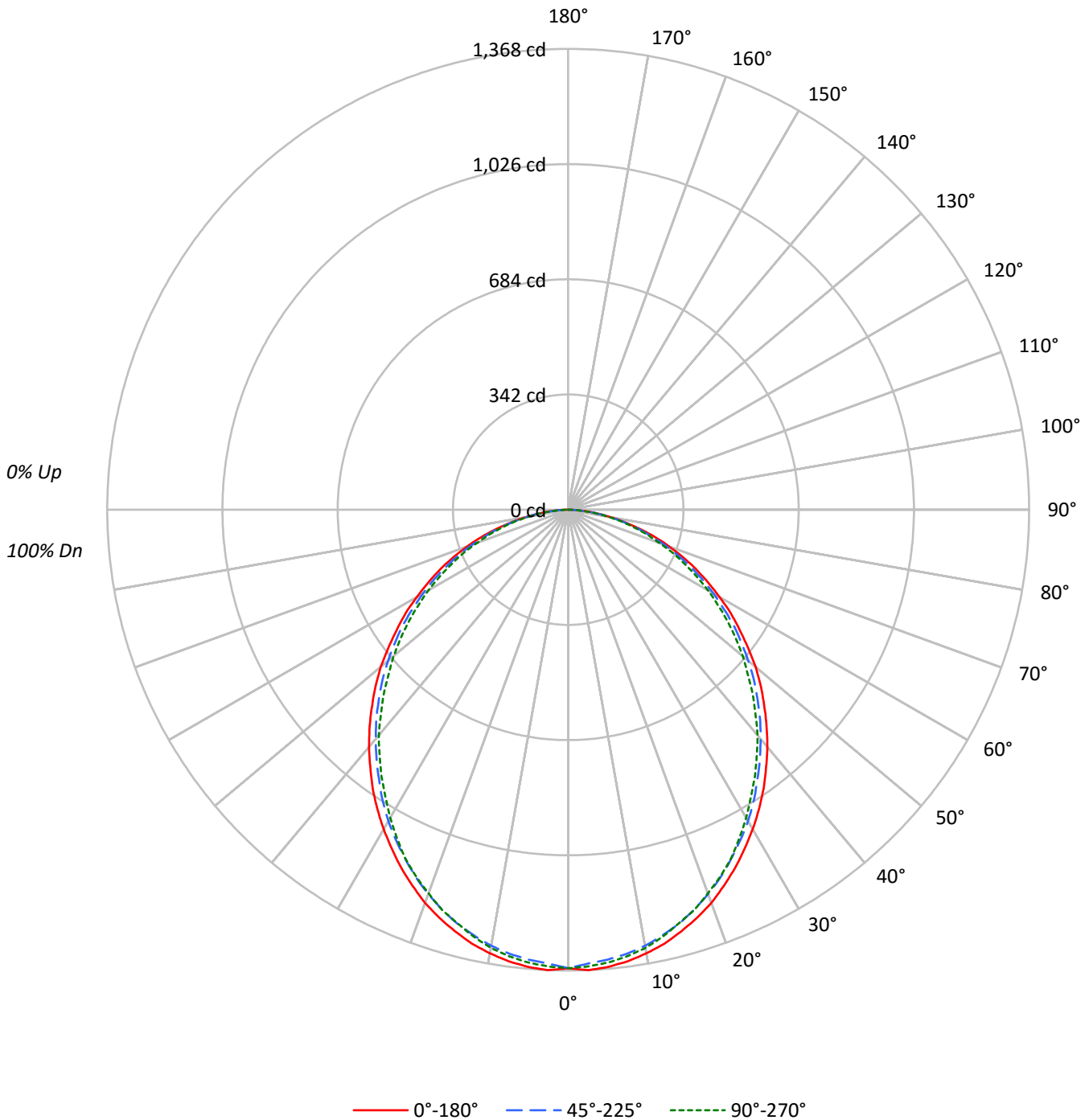
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	25922	25922	25922
5°	26046	25637	25805
10°	25862	25424	25546
15°	25551	25081	25056
20°	25171	24612	24561
25°	24649	24041	24016
30°	24084	23477	23228
35°	23509	22751	22458
40°	22861	22080	21737
45°	22164	21388	20847
50°	21519	20666	20035
55°	20619	19912	19161
60°	19733	18972	18252
65°	18880	17979	17185
70°	17743	16836	15995
75°	16154	15506	14770
80°	14030	13624	13075
85°	12064	10687	9878



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.1	3.7
10°-20°	360.7	10.4
20°-30°	530.3	15.3
30°-40°	615.8	17.8
40°-50°	614.9	17.8
50°-60°	535.6	15.5
60°-70°	396.1	11.4
70°-80°	223.3	6.4
80°-90°	58.2	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°	1019.1	29.4
0°-40°	1634.9	47.2
0°-60°	2785.4	80.4
0°-90°	3463.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3463.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1361	1361	1361	1361	1361	
5°	1362	1356	1341	1352	1350	129
15°	1296	1289	1272	1277	1271	365
25°	1173	1163	1144	1143	1143	540
35°	1011	1000	978	970	966	632
45°	823	814	794	781	774	635
55°	621	616	600	583	577	556
65°	419	413	399	386	381	414
75°	220	218	211	203	201	233
85°	55	53	49	46	45	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1360.9	1360.9	1360.9	1360.9	1360.9
2.5°	1368.4	1362.2	1348.4	1359.7	1357.1
5°	1362.2	1355.9	1340.8	1352.1	1349.6
7.5°	1352.1	1345.9	1329.6	1340.8	1337.1
10°	1337.1	1329.6	1314.5	1322.0	1320.8
12.5°	1319.5	1312.0	1294.4	1300.7	1298.2
15°	1295.7	1289.4	1271.9	1276.9	1270.6
17.5°	1270.6	1260.6	1244.3	1249.3	1245.5
20°	1241.8	1231.7	1214.2	1216.7	1211.7
22.5°	1207.9	1197.9	1181.5	1181.5	1179.0
25°	1172.8	1162.7	1143.9	1142.7	1142.7
27.5°	1133.9	1125.1	1106.3	1102.5	1100.0
30°	1095.0	1087.5	1067.4	1059.9	1056.1
32.5°	1053.6	1043.6	1024.8	1016.0	1009.7
35°	1011.0	999.7	978.4	969.6	965.8
37.5°	964.6	953.3	934.5	926.9	919.4
40°	919.4	909.4	888.0	876.8	874.2
42.5°	871.7	861.7	842.9	830.3	822.8
45°	822.8	814.0	794.0	781.4	773.9
47.5°	775.2	765.1	747.6	732.5	722.5
50°	726.2	716.2	697.4	679.8	676.1
52.5°	672.3	666.0	647.2	630.9	625.9
55°	620.9	615.9	599.6	583.2	577.0
57.5°	572.0	565.7	546.9	534.3	526.8
60°	518.0	514.3	498.0	484.2	479.1
62.5°	467.9	462.8	449.0	435.2	429.0
65°	418.9	412.7	398.9	386.3	381.3
67.5°	368.8	362.5	351.2	341.2	336.2
70°	318.6	313.6	302.3	293.5	287.2
72.5°	269.7	264.7	254.6	245.8	244.6
75°	219.5	218.2	210.7	203.2	200.7
77.5°	173.1	171.8	166.8	163.1	160.5
80°	127.9	127.9	124.2	120.4	119.2
82.5°	87.8	89.1	85.3	82.8	82.8
85°	55.2	52.7	48.9	46.4	45.2
87.5°	22.6	18.8	17.6	13.8	12.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)