

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: P242439

Luminaire Tested: **S123DR-S1000D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242439
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-11)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DR-S1000D840-X4F0-XX-UDD-F-W
Description: DEFINE 3 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: 3897.9 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.23' x L: 3.88' x H: 0')
CIE Type: Direct

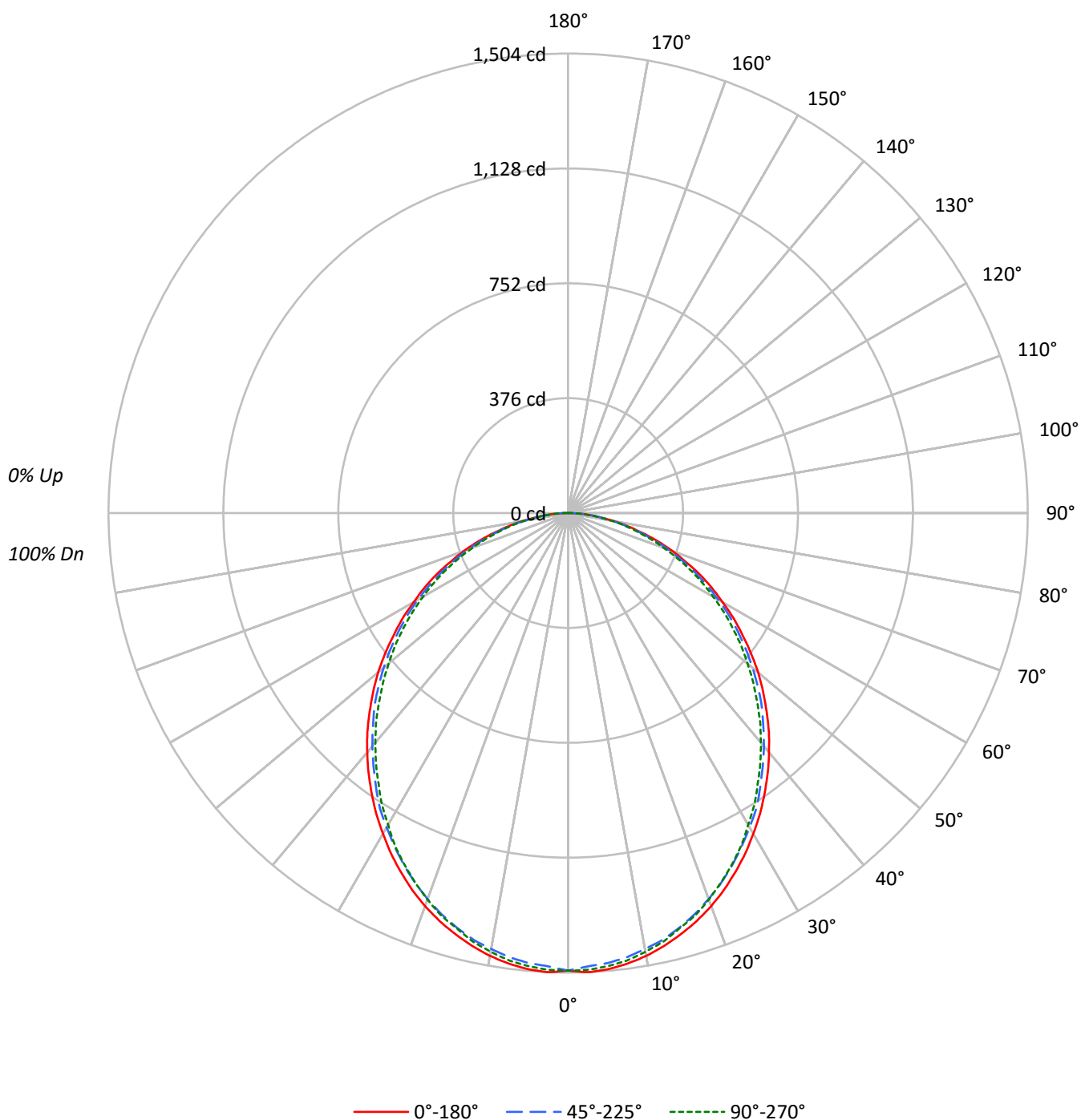
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	100	96	106	102	98	95		98	94	92		94	91	89		90	88	86
2	99	91	84	79	97	89	83	78		86	80	76		82	78	74		79	76	72
3	91	80	72	66	88	79	71	65		76	69	64		73	67	63		70	66	62
4	83	71	62	56	81	70	62	55		67	60	55		65	59	54		63	58	53
5	76	64	55	48	74	63	54	48		60	53	47		58	52	47		57	51	46
6	71	57	49	42	69	56	48	42		55	47	42		53	46	41		51	46	41
7	66	52	43	37	64	51	43	37		50	42	37		48	42	37		47	41	36
8	61	48	39	33	60	47	39	33		46	38	33		44	38	33		43	37	33
9	57	44	36	30	56	43	35	30		42	35	30		41	34	30		40	34	30
10	54	40	33	27	52	40	32	27		39	32	27		38	32	27		37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18154	18154	18154
5°	18239	17988	18114
10°	18118	17832	17943
15°	17906	17631	17664
20°	17659	17343	17360
25°	17328	17000	16965
30°	16961	16619	16493
35°	16579	16216	16008
40°	16179	15773	15527
45°	15740	15364	14989
50°	15299	14861	14450
55°	14723	14343	13907
60°	14143	13736	13299
65°	13629	13076	12669
70°	12872	12323	11777
75°	11760	11338	10856
80°	10610	10156	10066
85°	9318	8956	8595

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.2	3.6
10°-20°	398.7	10.2
20°-30°	588.8	15.1
30°-40°	687.7	17.6
40°-50°	691.3	17.7
50°-60°	607.3	15.6
60°-70°	452.3	11.6
70°-80°	257.4	6.6
80°-90°	73.2	1.9
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°	1128.7	29.0
0°-40°	1816.4	46.6
0°-60°	3115.1	79.9
0°-90°	3897.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3897.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1498	1498	1498	1498	1498	
5°	1499	1493	1478	1491	1489	142
15°	1427	1422	1405	1415	1408	402
25°	1296	1288	1271	1272	1268	597
35°	1120	1113	1096	1088	1082	701
45°	918	913	896	881	874	709
55°	697	695	679	664	658	624
65°	475	469	456	446	442	469
75°	251	246	242	236	232	268
85°	67	64	64	62	62	76
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1497.7	1497.7	1497.7	1497.7	1497.7
2.5°	1504.2	1499.0	1484.9	1497.7	1496.5
5°	1499.0	1492.6	1478.4	1491.3	1488.7
7.5°	1487.4	1481.0	1466.8	1478.4	1477.1
10°	1472.0	1465.5	1448.8	1460.4	1457.8
12.5°	1451.4	1446.2	1430.8	1438.5	1437.2
15°	1426.9	1421.8	1405.0	1415.3	1407.6
17.5°	1399.9	1393.4	1376.7	1384.4	1381.8
20°	1369.0	1361.2	1344.5	1349.6	1345.8
22.5°	1334.2	1326.5	1309.7	1313.6	1308.4
25°	1295.6	1287.8	1271.1	1272.4	1268.5
27.5°	1255.6	1247.9	1229.9	1231.2	1227.3
30°	1211.8	1205.4	1187.4	1187.4	1178.4
32.5°	1168.1	1159.0	1146.2	1137.1	1133.3
35°	1120.4	1112.7	1095.9	1088.2	1081.8
37.5°	1072.8	1062.5	1045.7	1036.7	1032.8
40°	1022.5	1014.8	996.8	986.5	981.3
42.5°	972.3	963.3	945.3	935.0	929.8
45°	918.2	913.1	896.3	880.9	874.4
47.5°	865.4	857.7	842.2	826.8	821.6
50°	811.3	804.9	788.1	774.0	766.3
52.5°	754.7	750.8	732.8	721.2	713.5
55°	696.7	695.4	678.7	664.5	658.1
57.5°	642.6	637.5	624.6	611.7	604.0
60°	583.4	582.1	566.6	555.1	548.6
62.5°	530.6	526.7	511.3	499.7	495.8
65°	475.2	468.8	455.9	445.6	441.7
67.5°	416.0	410.8	400.5	391.5	386.3
70°	363.2	355.4	347.7	338.7	332.3
72.5°	307.8	302.6	293.6	285.9	283.3
75°	251.1	246.0	242.1	235.7	231.8
77.5°	200.9	198.3	193.2	188.0	188.0
80°	152.0	148.1	145.5	144.2	144.2
82.5°	104.3	104.3	104.3	101.7	100.5
85°	67.0	64.4	64.4	61.8	61.8
87.5°	33.5	29.6	28.3	27.0	27.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)