

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: P242450

Luminaire Tested: **S123DR-S1165D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242450
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-S1165D935-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3862.4 lumens
Efficiency: N/A
Efficacy: 94.0 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

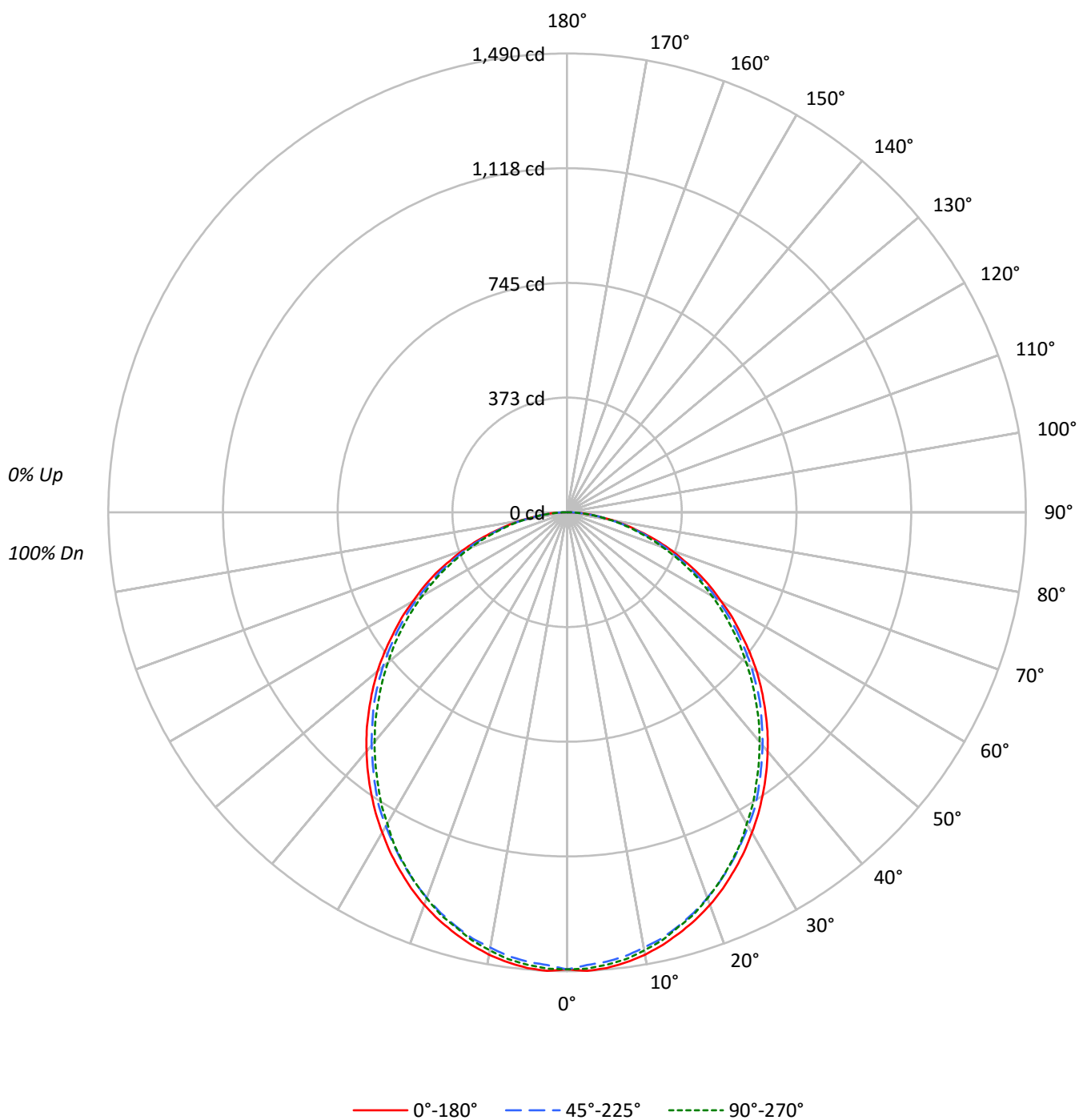
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P242450

CATALOG NUMBER: S123DR-S1165D935-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P242450

CATALOG NUMBER: S123DR-S1165D935-X4F0-XX-UDD-F-W

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	109	104	100	96	106	102	98	95		98	94	92			94	91	89			90
2	99	91	84	79	97	89	83	78		86	80	76			82	78	74			79
3	91	80	72	66	88	79	71	65		76	69	64			73	67	63			70
4	83	71	62	56	81	70	62	55		67	60	55			65	59	54			63
5	76	64	55	48	74	63	54	48		60	53	47			58	52	47			57
6	71	57	49	42	69	56	48	42		55	47	42			53	46	41			51
7	66	52	43	37	64	51	43	37		50	42	37			48	42	37			47
8	61	48	39	33	60	47	39	33		46	38	33			44	38	33			43
9	57	44	36	30	56	43	35	30		42	35	30			41	34	30			40
10	54	40	33	27	52	40	32	27		39	32	27			38	32	27			37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17989	17989	17989
5°	18072	17824	17948
10°	17952	17670	17779
15°	17743	17470	17502
20°	17498	17184	17201
25°	17169	16845	16810
30°	16807	16467	16342
35°	16428	16068	15861
40°	16032	15629	15386
45°	15596	15224	14852
50°	15159	14728	14318
55°	14590	14212	13781
60°	14015	13612	13178
65°	13506	12955	12554
70°	12755	12209	11667
75°	11652	11235	10757
80°	10512	10066	9975
85°	9235	8873	8525

TEST NUMBER: P242450

CATALOG NUMBER: S123DR-S1165D935-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.9	3.6
10°-20°	395.1	10.2
20°-30°	583.4	15.1
30°-40°	681.4	17.6
40°-50°	685.0	17.7
50°-60°	601.8	15.6
60°-70°	448.2	11.6
70°-80°	255.0	6.6
80°-90°	72.5	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°	1118.4	29.0
0°-40°	1799.8	46.6
0°-60°	3086.6	79.9
0°-90°	3862.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3862.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1484	1484	1484	1484	1484	
5°	1485	1479	1465	1478	1475	141
15°	1414	1409	1392	1402	1395	399
25°	1284	1276	1260	1261	1257	591
35°	1110	1102	1086	1078	1072	695
45°	910	905	888	873	866	702
55°	690	689	672	658	652	618
65°	471	464	452	442	438	465
75°	249	244	240	234	230	266
85°	66	64	64	61	61	76
90°	0	0	0	0	0	

TEST NUMBER: P242450

CATALOG NUMBER: S123DR-S1165D935-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1484.1	1484.1	1484.1	1484.1	1484.1
2.5°	1490.4	1485.3	1471.3	1484.1	1482.8
5°	1485.3	1479.0	1464.9	1477.7	1475.1
7.5°	1473.9	1467.5	1453.4	1464.9	1463.6
10°	1458.5	1452.2	1435.6	1447.1	1444.5
12.5°	1438.1	1433.0	1417.7	1425.4	1424.1
15°	1413.9	1408.8	1392.2	1402.4	1394.7
17.5°	1387.1	1380.7	1364.1	1371.8	1369.2
20°	1356.5	1348.8	1332.2	1337.3	1333.5
22.5°	1322.0	1314.3	1297.8	1301.6	1296.5
25°	1283.7	1276.1	1259.5	1260.8	1256.9
27.5°	1244.2	1236.5	1218.6	1219.9	1216.1
30°	1200.8	1194.4	1176.5	1176.5	1167.6
32.5°	1157.4	1148.5	1135.7	1126.8	1122.9
35°	1110.2	1102.5	1085.9	1078.3	1071.9
37.5°	1063.0	1052.8	1036.2	1027.2	1023.4
40°	1013.2	1005.5	987.7	977.5	972.4
42.5°	963.4	954.5	936.6	926.4	921.3
45°	909.8	904.7	888.1	872.8	866.4
47.5°	857.5	849.9	834.5	819.2	814.1
50°	803.9	797.5	781.0	766.9	759.3
52.5°	747.8	743.9	726.1	714.6	706.9
55°	690.4	689.1	672.5	658.5	652.1
57.5°	636.8	631.7	618.9	606.1	598.5
60°	578.1	576.8	561.5	550.0	543.6
62.5°	525.7	521.9	506.6	495.1	491.3
65°	470.9	464.5	451.7	441.5	437.7
67.5°	412.2	407.1	396.9	387.9	382.8
70°	359.9	352.2	344.5	335.6	329.2
72.5°	305.0	299.9	290.9	283.3	280.7
75°	248.8	243.7	239.9	233.5	229.7
77.5°	199.1	196.5	191.4	186.3	186.3
80°	150.6	146.7	144.2	142.9	142.9
82.5°	103.4	103.4	103.4	100.8	99.5
85°	66.4	63.8	63.8	61.3	61.3
87.5°	33.2	29.3	28.1	26.8	26.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)