

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: P243294

Luminaire Tested: **S123DR-H1000D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243294
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-49)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DR-H1000D835-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3863.8 lumens
Efficiency: N/A
Efficacy: 122.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.23' x L: 3.88' x H: 0')
CIE Type: Direct

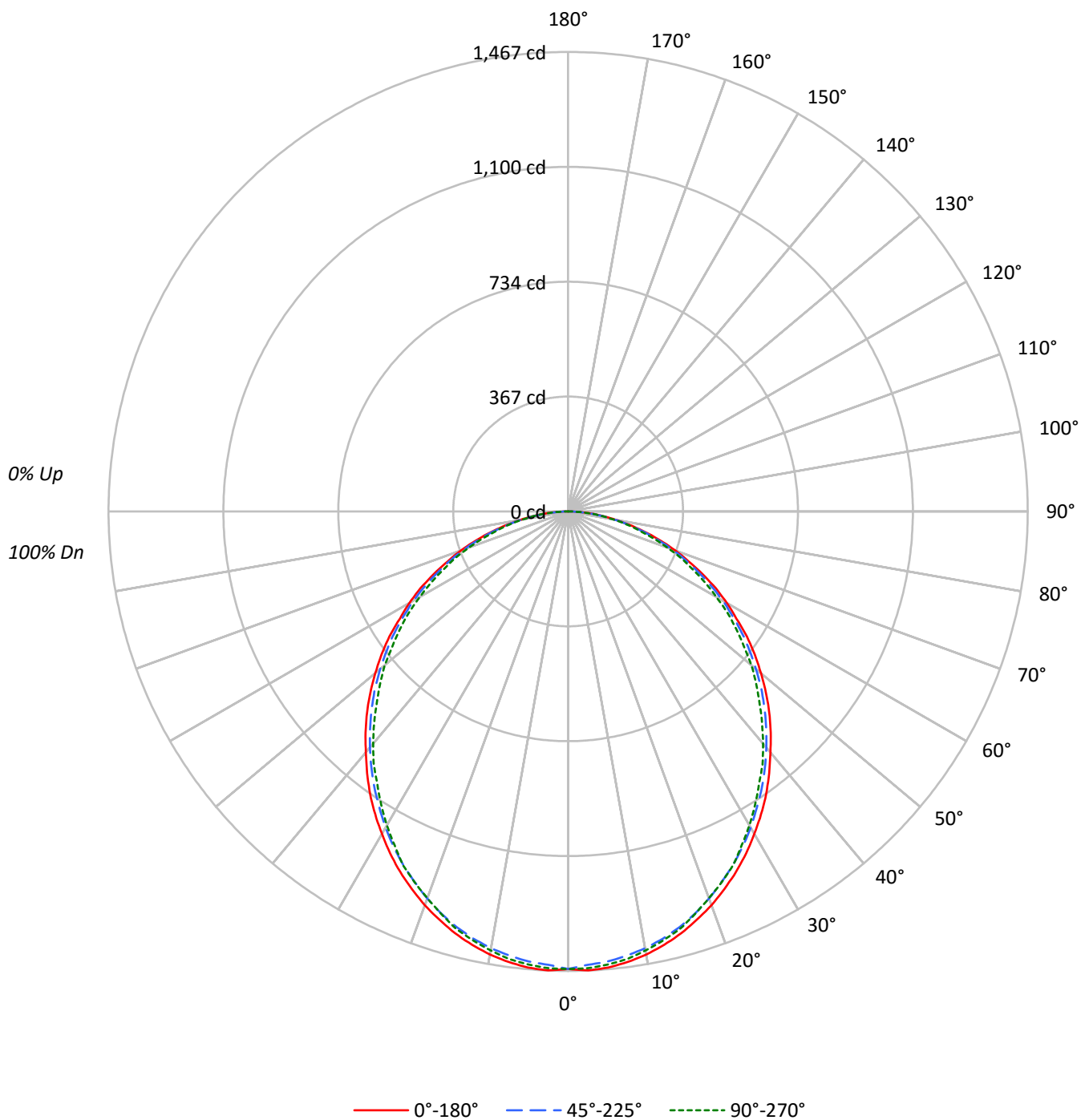
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P243294

CATALOG NUMBER: S123DR-H1000D835-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot



TEST NUMBER: P243294

CATALOG NUMBER: S123DR-H1000D835-X4F0-XX-UDD-F-W

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	94		97	94	91		94	91	89		90	88	86
2	99	91	84	78	96	89	83	77		85	80	76		82	78	74		79	75	72
3	90	80	72	65	88	78	71	65		75	69	64		73	67	62		70	65	61
4	83	71	62	55	80	70	61	55		67	60	54		65	59	54		63	57	53
5	76	63	54	48	74	62	54	48		60	53	47		58	52	47		56	51	46
6	70	57	48	42	69	56	48	42		54	47	41		53	46	41		51	45	41
7	65	52	43	37	64	51	43	37		50	42	37		48	41	36		47	41	36
8	61	47	39	33	59	47	39	33		45	38	33		44	37	33		43	37	32
9	57	44	35	30	56	43	35	30		42	35	30		41	34	29		40	34	29
10	53	40	32	27	52	40	32	27		39	32	27		38	31	27		37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17704	17704	17704
5°	17786	17552	17668
10°	17681	17428	17517
15°	17497	17241	17316
20°	17256	16961	16946
25°	16973	16651	16667
30°	16633	16314	16195
35°	16304	15947	15715
40°	15890	15567	15318
45°	15563	15191	14799
50°	15144	14760	14396
55°	14708	14326	13842
60°	14187	13806	13253
65°	13572	13159	12605
70°	12886	12461	11947
75°	11956	11615	10996
80°	10757	10505	10170
85°	10041	9541	9207

TEST NUMBER: P243294

CATALOG NUMBER: S123DR-H1000D835-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.8	3.6
10°-20°	389.7	10.1
20°-30°	576.9	14.9
30°-40°	676.6	17.5
40°-50°	684.0	17.7
50°-60°	605.0	15.7
60°-70°	454.3	11.8
70°-80°	261.9	6.8
80°-90°	77.7	2.0
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°	1104.4	28.6
0°-40°	1781.0	46.1
0°-60°	3070.0	79.5
0°-90°	3863.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3863.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1461	1461	1461	1461	1461	
5°	1462	1456	1442	1455	1452	139
15°	1394	1387	1374	1384	1380	393
25°	1269	1260	1245	1251	1246	584
35°	1102	1092	1078	1074	1062	688
45°	908	901	886	874	863	700
55°	696	691	678	665	655	621
65°	473	470	459	447	440	469
75°	255	253	248	241	235	271
85°	72	71	69	67	66	81
90°	0	0	0	0	0	

TEST NUMBER: P243294

CATALOG NUMBER: S123DR-H1000D835-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1460.6	1460.6	1460.6	1460.6	1460.6
2.5°	1466.6	1461.8	1448.5	1461.8	1459.4
5°	1461.8	1455.8	1442.5	1454.6	1452.1
7.5°	1450.9	1444.9	1430.5	1443.7	1441.3
10°	1436.5	1430.5	1416.0	1426.9	1423.2
12.5°	1417.2	1411.2	1396.8	1405.2	1402.8
15°	1394.3	1387.1	1373.9	1383.5	1379.9
17.5°	1366.7	1360.6	1346.2	1358.2	1347.4
20°	1337.8	1331.7	1314.9	1325.7	1313.7
22.5°	1304.0	1296.8	1280.0	1287.2	1281.2
25°	1269.1	1259.5	1245.0	1251.1	1246.2
27.5°	1230.6	1221.0	1206.5	1208.9	1200.5
30°	1188.4	1180.0	1165.6	1168.0	1157.1
32.5°	1146.3	1139.1	1121.0	1121.0	1110.2
35°	1101.8	1092.1	1077.7	1074.1	1062.0
37.5°	1053.6	1045.2	1031.9	1025.9	1018.7
40°	1004.2	999.4	983.8	976.5	968.1
42.5°	957.3	948.8	935.6	926.0	916.3
45°	907.9	900.7	886.2	874.2	863.3
47.5°	856.1	850.1	835.6	822.4	814.0
50°	803.1	798.3	782.7	768.2	763.4
52.5°	751.4	745.3	729.7	716.4	706.8
55°	696.0	691.2	677.9	664.7	655.0
57.5°	637.0	637.0	622.5	610.5	603.3
60°	585.2	579.2	569.5	556.3	546.7
62.5°	531.0	527.4	514.2	500.9	493.7
65°	473.2	469.6	458.8	446.7	439.5
67.5°	416.6	415.4	405.8	396.1	391.3
70°	363.6	361.2	351.6	342.0	337.1
72.5°	309.5	307.0	298.6	290.2	284.2
75°	255.3	252.9	248.0	240.8	234.8
77.5°	202.3	202.3	196.3	193.9	191.5
80°	154.1	152.9	150.5	148.1	145.7
82.5°	110.8	109.6	107.2	106.0	106.0
85°	72.2	71.0	68.6	67.4	66.2
87.5°	37.3	34.9	33.7	31.3	30.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)