

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: P242434

Luminaire Tested: **S123DR-S1000D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242434
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-S1000D835-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3859.9 lumens
Efficiency: N/A
Efficacy: 110.9 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

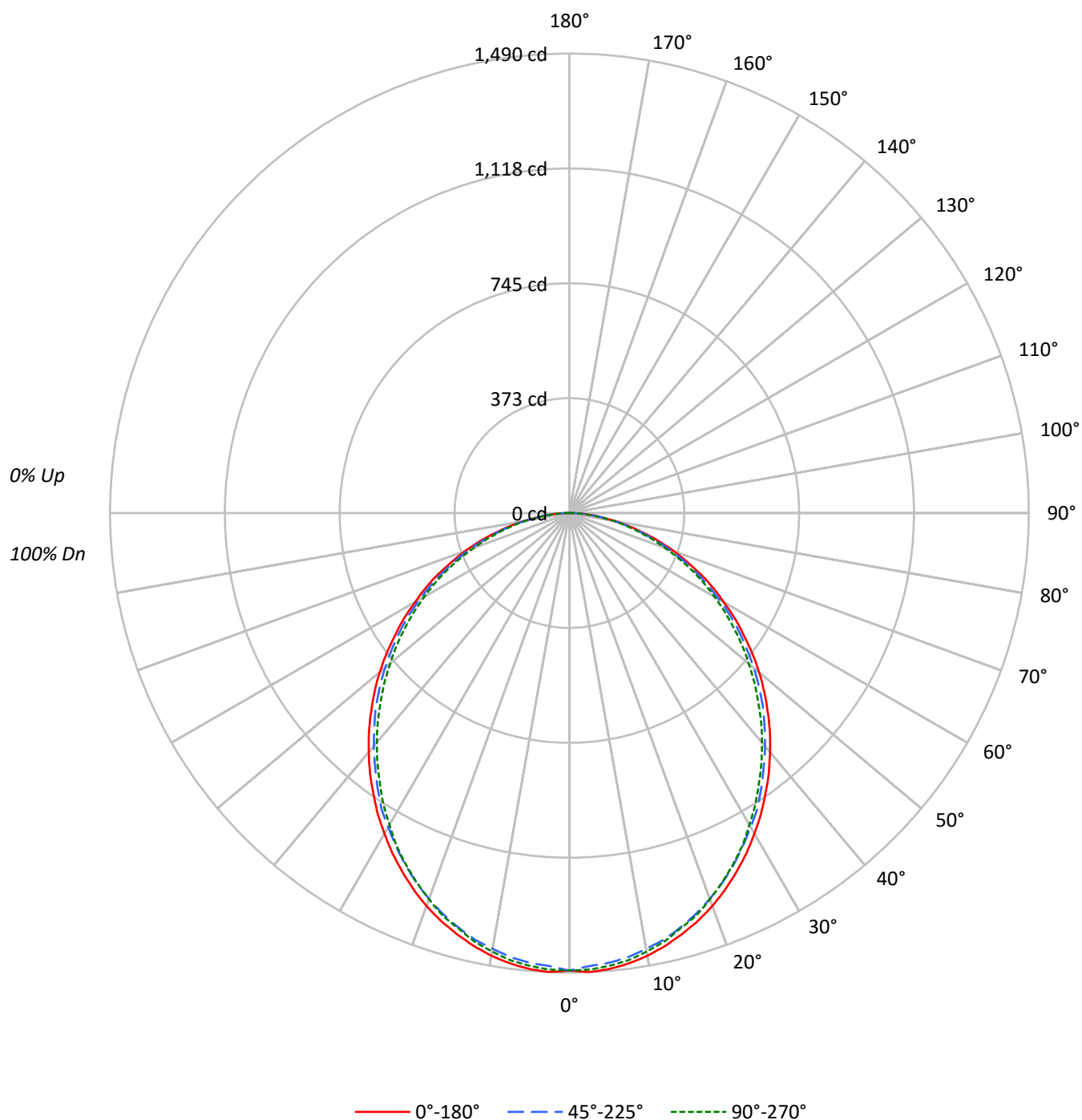
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84		84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70		70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59		59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44		44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39		39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34		34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31		31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28		28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17977	17977	17977
5°	18061	17813	17937
10°	17940	17659	17768
15°	17731	17459	17491
20°	17486	17174	17189
25°	17158	16834	16799
30°	16796	16457	16331
35°	16418	16058	15851
40°	16021	15617	15375
45°	15586	15215	14843
50°	15150	14716	14309
55°	14579	14203	13772
60°	14005	13602	13171
65°	13497	12947	12545
70°	12744	12202	11660
75°	11647	11226	10748
80°	10505	10059	9968
85°	9221	8873	8511

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.8	3.6
10°-20°	394.8	10.2
20°-30°	583.1	15.1
30°-40°	681.0	17.6
40°-50°	684.6	17.7
50°-60°	601.4	15.6
60°-70°	447.9	11.6
70°-80°	254.9	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°	1117.7	29.0
0°-40°	1798.7	46.6
0°-60°	3084.6	79.9
0°-90°	3859.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3859.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1483	1483	1483	1483	1483	
5°	1484	1478	1464	1477	1474	141
15°	1413	1408	1391	1402	1394	398
25°	1283	1275	1259	1260	1256	591
35°	1110	1102	1085	1078	1071	694
45°	909	904	888	872	866	702
55°	690	689	672	658	652	618
65°	471	464	451	441	437	464
75°	249	244	240	233	230	266
85°	66	64	64	61	61	76
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1483.1	1483.1	1483.1	1483.1	1483.1
2.5°	1489.5	1484.4	1470.4	1483.1	1481.8
5°	1484.4	1478.0	1464.0	1476.7	1474.2
7.5°	1472.9	1466.5	1452.5	1464.0	1462.7
10°	1457.6	1451.2	1434.7	1446.1	1443.6
12.5°	1437.2	1432.1	1416.8	1424.4	1423.2
15°	1413.0	1407.9	1391.3	1401.5	1393.8
17.5°	1386.2	1379.8	1363.2	1370.9	1368.3
20°	1355.6	1347.9	1331.4	1336.5	1332.6
22.5°	1321.2	1313.5	1296.9	1300.7	1295.6
25°	1282.9	1275.2	1258.7	1259.9	1256.1
27.5°	1243.4	1235.7	1217.9	1219.1	1215.3
30°	1200.0	1193.6	1175.8	1175.8	1166.8
32.5°	1156.6	1147.7	1135.0	1126.0	1122.2
35°	1109.5	1101.8	1085.2	1077.6	1071.2
37.5°	1062.3	1052.1	1035.5	1026.6	1022.7
40°	1012.5	1004.9	987.0	976.8	971.7
42.5°	962.8	953.9	936.0	925.8	920.7
45°	909.2	904.1	887.6	872.3	865.9
47.5°	857.0	849.3	834.0	818.7	813.6
50°	803.4	797.0	780.4	766.4	758.8
52.5°	747.3	743.5	725.6	714.1	706.5
55°	689.9	688.6	672.1	658.0	651.7
57.5°	636.3	631.2	618.5	605.7	598.1
60°	577.7	576.4	561.1	549.6	543.3
62.5°	525.4	521.6	506.3	494.8	491.0
65°	470.6	464.2	451.4	441.2	437.4
67.5°	411.9	406.8	396.6	387.7	382.6
70°	359.6	352.0	344.3	335.4	329.0
72.5°	304.8	299.7	290.8	283.1	280.6
75°	248.7	243.6	239.7	233.4	229.5
77.5°	198.9	196.4	191.3	186.2	186.2
80°	150.5	146.7	144.1	142.8	142.8
82.5°	103.3	103.3	103.3	100.7	99.5
85°	66.3	63.8	63.8	61.2	61.2
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)