

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: P242430

Luminaire Tested: **S123DR-S1000D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242430
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-S1000D830-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3638.1 lumens
Efficiency: N/A
Efficacy: 104.5 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

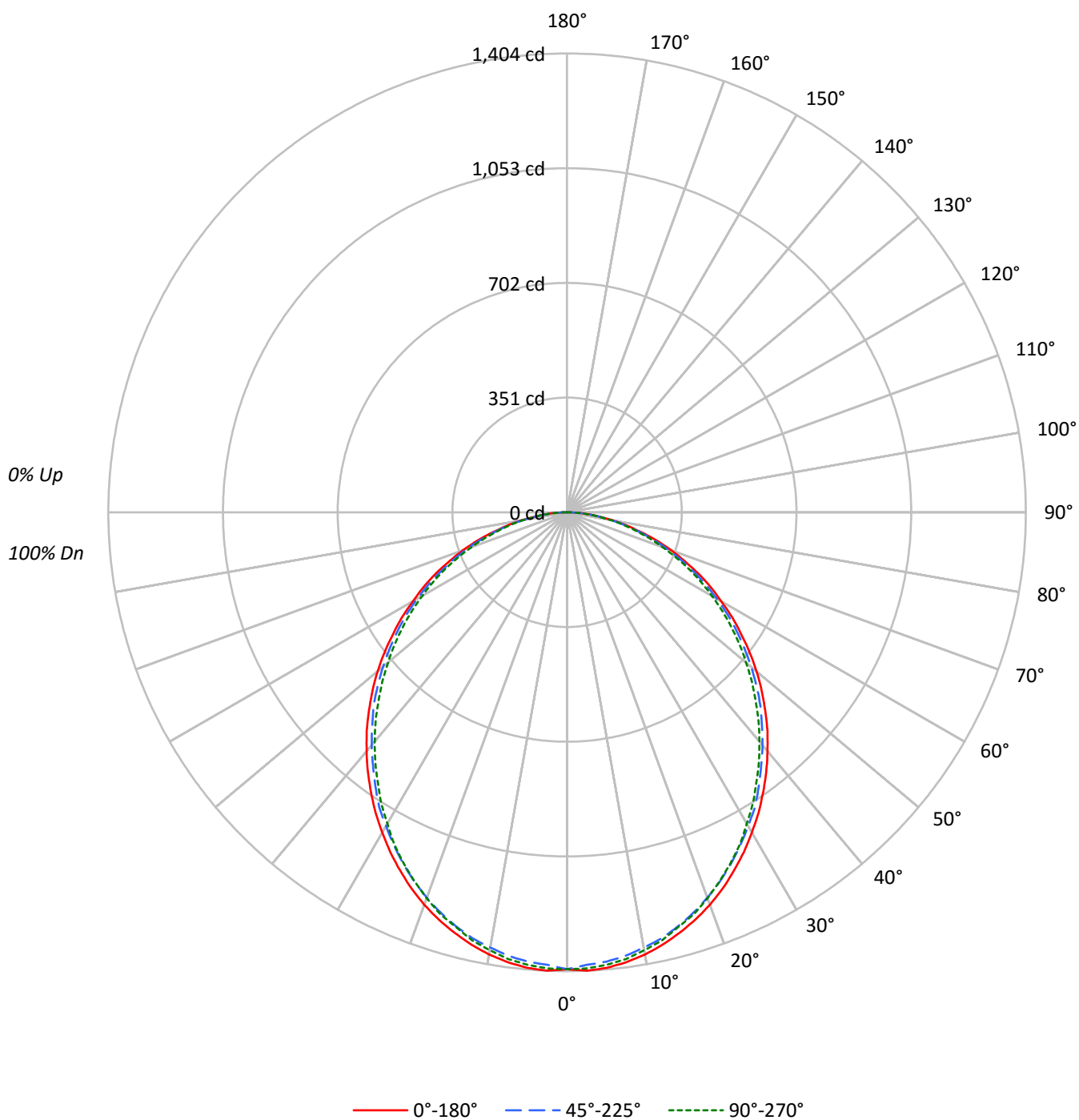
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	16944	16944	16944
5°	17024	16790	16907
10°	16910	16643	16747
15°	16713	16457	16487
20°	16481	16187	16203
25°	16172	15866	15834
30°	15831	15511	15393
35°	15474	15136	14941
40°	15102	14720	14492
45°	14691	14341	13990
50°	14279	13871	13487
55°	13743	13385	12980
60°	13200	12822	12412
65°	12720	12204	11825
70°	12014	11500	10990
75°	10978	10584	10135
80°	9898	9479	9396
85°	8692	8358	8025

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.8	3.6
10°-20°	372.1	10.2
20°-30°	549.6	15.1
30°-40°	641.9	17.6
40°-50°	645.3	17.7
50°-60°	566.8	15.6
60°-70°	422.2	11.6
70°-80°	240.2	6.6
80°-90°	68.3	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°	1053.5	29.0
0°-40°	1695.3	46.6
0°-60°	2907.4	79.9
0°-90°	3638.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3638.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1398	1398	1398	1398	1398	
5°	1399	1393	1380	1392	1390	133
15°	1332	1327	1311	1321	1314	376
25°	1209	1202	1186	1188	1184	557
35°	1046	1038	1023	1016	1010	654
45°	857	852	837	822	816	662
55°	650	649	633	620	614	583
65°	444	438	426	416	412	438
75°	234	230	226	220	216	250
85°	62	60	60	58	58	71
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1397.9	1397.9	1397.9	1397.9	1397.9
2.5°	1403.9	1399.1	1385.9	1397.9	1396.7
5°	1399.1	1393.1	1379.9	1391.9	1389.5
7.5°	1388.3	1382.3	1369.0	1379.9	1378.7
10°	1373.9	1367.8	1352.2	1363.0	1360.6
12.5°	1354.6	1349.8	1335.4	1342.6	1341.4
15°	1331.8	1327.0	1311.4	1321.0	1313.8
17.5°	1306.5	1300.5	1284.9	1292.1	1289.7
20°	1277.7	1270.5	1254.9	1259.7	1256.1
22.5°	1245.2	1238.0	1222.4	1226.0	1221.2
25°	1209.2	1202.0	1186.3	1187.5	1183.9
27.5°	1171.9	1164.7	1147.9	1149.1	1145.5
30°	1131.1	1125.0	1108.2	1108.2	1099.8
32.5°	1090.2	1081.8	1069.8	1061.3	1057.7
35°	1045.7	1038.5	1022.9	1015.7	1009.7
37.5°	1001.2	991.6	976.0	967.6	964.0
40°	954.4	947.2	930.3	920.7	915.9
42.5°	907.5	899.1	882.2	872.6	867.8
45°	857.0	852.2	836.6	822.1	816.1
47.5°	807.7	800.5	786.1	771.7	766.9
50°	757.2	751.2	735.6	722.4	715.2
52.5°	704.4	700.7	683.9	673.1	665.9
55°	650.3	649.1	633.4	620.2	614.2
57.5°	599.8	595.0	583.0	570.9	563.7
60°	544.5	543.3	528.9	518.1	512.0
62.5°	495.2	491.6	477.2	466.4	462.8
65°	443.5	437.5	425.5	415.9	412.3
67.5°	388.2	383.4	373.8	365.4	360.6
70°	339.0	331.7	324.5	316.1	310.1
72.5°	287.3	282.5	274.0	266.8	264.4
75°	234.4	229.6	226.0	220.0	216.4
77.5°	187.5	185.1	180.3	175.5	175.5
80°	141.8	138.2	135.8	134.6	134.6
82.5°	97.4	97.4	97.4	95.0	93.8
85°	62.5	60.1	60.1	57.7	57.7
87.5°	31.3	27.6	26.4	25.2	25.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)