

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: P243290

Luminaire Tested: **S123DR-H1000D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243290
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-H1000D830-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3641.8 lumens
Efficiency: N/A
Efficacy: 115.6 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

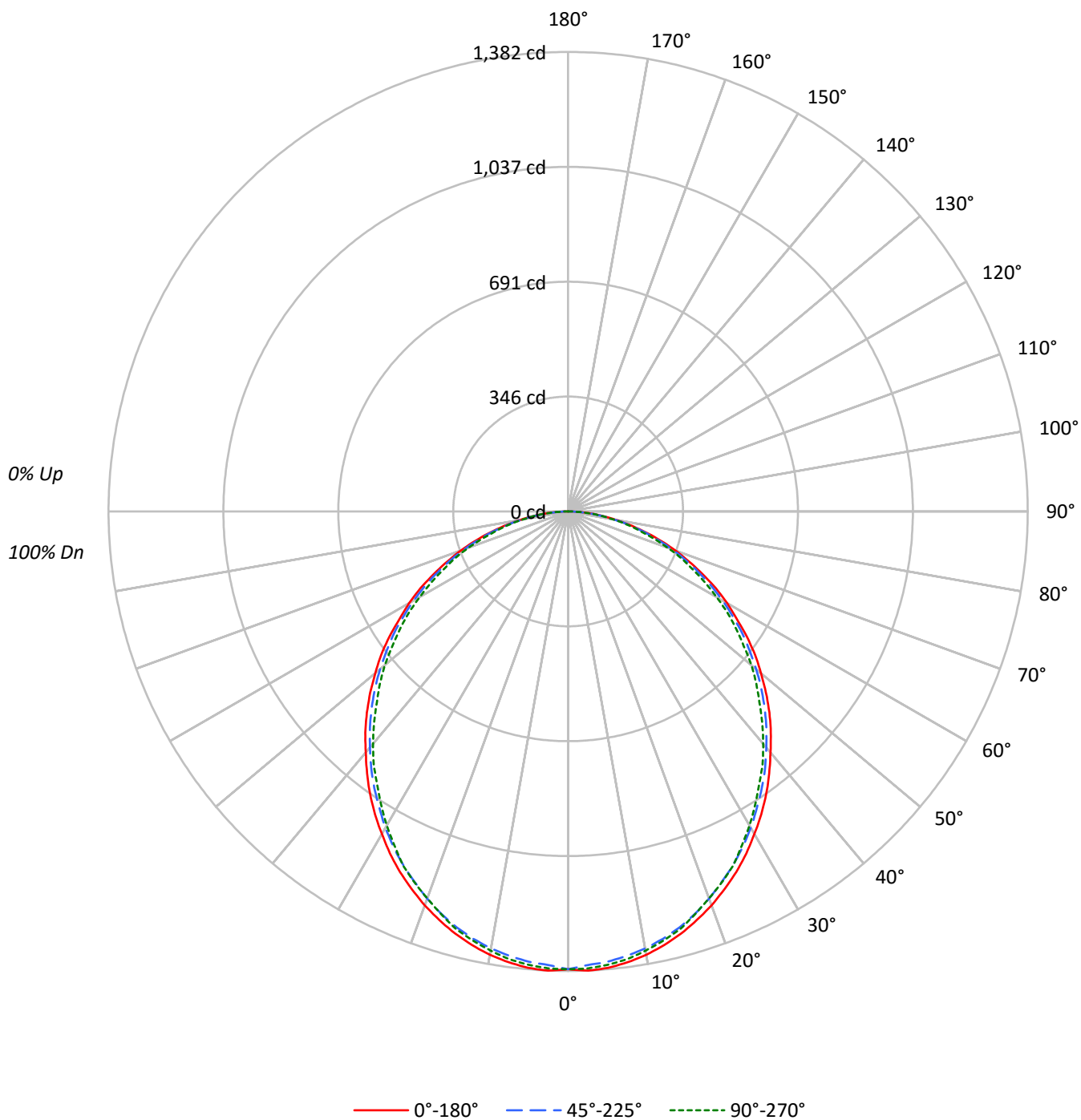
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P243290

CATALOG NUMBER: S123DR-H1000D830-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot



TEST NUMBER: P243290

CATALOG NUMBER: S123DR-H1000D830-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	30	10	0		
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84		
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	70		
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	59		
4	83	71	62	55	80	70	61	55	67	60	54	65	59	54	63	57	53	51		
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39		
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34		
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30		
9	57	44	35	30	56	43	35	30	42	35	30	41	34	29	40	34	29	27		
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16687	16687	16687
5°	16764	16543	16654
10°	16665	16428	16511
15°	16492	16249	16321
20°	16265	15986	15972
25°	15998	15695	15709
30°	15679	15376	15266
35°	15365	15030	14812
40°	14977	14671	14439
45°	14668	14319	13948
50°	14275	13911	13568
55°	13863	13504	13047
60°	13372	13013	12492
65°	12792	12402	11880
70°	12145	11745	11263
75°	11268	10950	10364
80°	10142	9905	9584
85°	9471	8998	8678

TEST NUMBER: P243290

CATALOG NUMBER: S123DR-H1000D830-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.9	3.6
10°-20°	367.3	10.1
20°-30°	543.8	14.9
30°-40°	637.7	17.5
40°-50°	644.7	17.7
50°-60°	570.2	15.7
60°-70°	428.2	11.8
70°-80°	246.8	6.8
80°-90°	73.2	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°	1040.9	28.6
0°-40°	1678.6	46.1
0°-60°	2893.6	79.5
0°-90°	3641.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3641.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1377	1377	1377	1377	1377	
5°	1378	1372	1360	1371	1369	131
15°	1314	1307	1295	1304	1301	370
25°	1196	1187	1174	1179	1175	551
35°	1038	1029	1016	1012	1001	649
45°	856	849	835	824	814	659
55°	656	651	639	626	617	586
65°	446	443	432	421	414	442
75°	241	238	234	227	221	255
85°	68	67	65	64	62	76
90°	0	0	0	0	0	

TEST NUMBER: P243290

CATALOG NUMBER: S123DR-H1000D830-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1376.7	1376.7	1376.7	1376.7	1376.7
2.5°	1382.3	1377.8	1365.3	1377.8	1375.5
5°	1377.8	1372.1	1359.6	1371.0	1368.7
7.5°	1367.6	1361.9	1348.3	1360.8	1358.5
10°	1354.0	1348.3	1334.7	1344.9	1341.5
12.5°	1335.8	1330.1	1316.5	1324.4	1322.2
15°	1314.2	1307.4	1294.9	1304.0	1300.6
17.5°	1288.1	1282.5	1268.8	1280.2	1270.0
20°	1260.9	1255.2	1239.3	1249.5	1238.2
22.5°	1229.1	1222.3	1206.4	1213.2	1207.6
25°	1196.2	1187.1	1173.5	1179.2	1174.6
27.5°	1159.9	1150.8	1137.2	1139.5	1131.5
30°	1120.2	1112.2	1098.6	1100.9	1090.7
32.5°	1080.4	1073.6	1056.6	1056.6	1046.4
35°	1038.4	1029.4	1015.7	1012.3	1001.0
37.5°	993.1	985.1	972.6	966.9	960.1
40°	946.5	942.0	927.2	920.4	912.5
42.5°	902.3	894.3	881.8	872.8	863.7
45°	855.7	848.9	835.3	823.9	813.7
47.5°	806.9	801.3	787.6	775.1	767.2
50°	757.0	752.4	737.7	724.1	719.5
52.5°	708.2	702.5	687.8	675.3	666.2
55°	656.0	651.4	639.0	626.5	617.4
57.5°	600.4	600.4	586.8	575.4	568.6
60°	551.6	545.9	536.8	524.3	515.3
62.5°	500.5	497.1	484.6	472.1	465.3
65°	446.0	442.6	432.4	421.1	414.2
67.5°	392.7	391.5	382.5	373.4	368.8
70°	342.7	340.5	331.4	322.3	317.8
72.5°	291.7	289.4	281.5	273.5	267.8
75°	240.6	238.3	233.8	227.0	221.3
77.5°	190.7	190.7	185.0	182.7	180.5
80°	145.3	144.1	141.9	139.6	137.3
82.5°	104.4	103.3	101.0	99.9	99.9
85°	68.1	67.0	64.7	63.6	62.4
87.5°	35.2	32.9	31.8	29.5	28.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)