

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: P243304

Luminaire Tested: **S123DR-H1000D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243304
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-H1000D930-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3150.2 lumens
Efficiency: N/A
Efficacy: 100.0 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

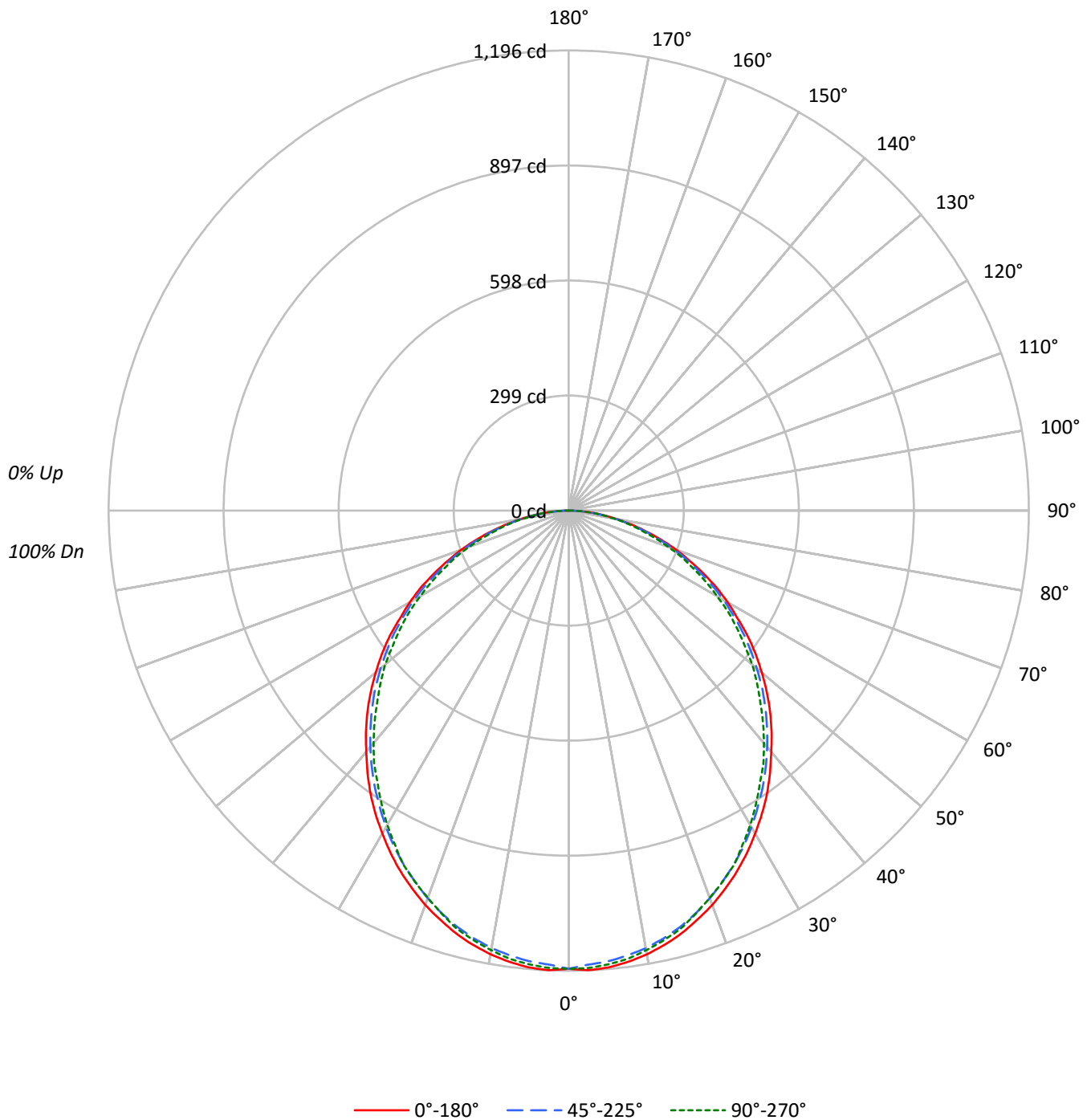
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P243304

CATALOG NUMBER: S123DR-H1000D930-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot



TEST NUMBER: P243304

CATALOG NUMBER: S123DR-H1000D930-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	50	30	10
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°	14434	14434	14434
5°	14501	14310	14405
10°	14415	14210	14282
15°	14265	14056	14117
20°	14069	13828	13815
25°	13838	13576	13590
30°	13561	13301	13204
35°	13292	13001	12813
40°	12954	12692	12489
45°	12689	12385	12066
50°	12348	12033	11737
55°	11991	11680	11285
60°	11566	11256	10805
65°	11065	10727	10276
70°	10508	10161	9742
75°	9746	9470	8964
80°	8774	8565	8293
85°	8192	7788	7510

TEST NUMBER: P243304

CATALOG NUMBER: S123DR-H1000D930-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.3	3.6
10°-20°	317.7	10.1
20°-30°	470.4	14.9
30°-40°	551.6	17.5
40°-50°	557.7	17.7
50°-60°	493.2	15.7
60°-70°	370.4	11.8
70°-80°	213.5	6.8
80°-90°	63.3	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°	900.4	28.6
0°-40°	1452.0	46.1
0°-60°	2502.9	79.5
0°-90°	3150.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3150.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1191	1191	1191	1191	1191	
5°	1192	1187	1176	1186	1184	113
15°	1137	1131	1120	1128	1125	320
25°	1035	1027	1015	1020	1016	476
35°	898	890	879	876	866	561
45°	740	734	722	713	704	570
55°	567	564	553	542	534	507
65°	386	383	374	364	358	382
75°	208	206	202	196	191	221
85°	59	58	56	55	54	66
90°	0	0	0	0	0	

TEST NUMBER: P243304

CATALOG NUMBER: S123DR-H1000D930-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1190.8	1190.8	1190.8	1190.8	1190.8
2.5°	1195.7	1191.8	1181.0	1191.8	1189.8
5°	1191.8	1186.9	1176.1	1185.9	1183.9
7.5°	1183.0	1178.0	1166.3	1177.1	1175.1
10°	1171.2	1166.3	1154.5	1163.3	1160.4
12.5°	1155.5	1150.6	1138.8	1145.6	1143.7
15°	1136.8	1130.9	1120.1	1128.0	1125.0
17.5°	1114.2	1109.3	1097.5	1107.4	1098.5
20°	1090.7	1085.8	1072.0	1080.9	1071.0
22.5°	1063.2	1057.3	1043.5	1049.4	1044.5
25°	1034.7	1026.9	1015.1	1020.0	1016.1
27.5°	1003.3	995.4	983.7	985.6	978.8
30°	968.9	962.1	950.3	952.3	943.4
32.5°	934.6	928.7	914.0	914.0	905.1
35°	898.3	890.4	878.6	875.7	865.9
37.5°	859.0	852.1	841.3	836.4	830.5
40°	818.7	814.8	802.1	796.2	789.3
42.5°	780.5	773.6	762.8	754.9	747.1
45°	740.2	734.3	722.5	712.7	703.9
47.5°	698.0	693.1	681.3	670.5	663.6
50°	654.8	650.9	638.1	626.3	622.4
52.5°	612.6	607.7	594.9	584.1	576.3
55°	567.4	563.5	552.7	541.9	534.0
57.5°	519.3	519.3	507.5	497.7	491.8
60°	477.1	472.2	464.3	453.5	445.7
62.5°	432.9	430.0	419.2	408.4	402.5
65°	385.8	382.9	374.0	364.2	358.3
67.5°	339.7	338.7	330.8	323.0	319.1
70°	296.5	294.5	286.7	278.8	274.9
72.5°	252.3	250.3	243.5	236.6	231.7
75°	208.1	206.2	202.2	196.3	191.4
77.5°	164.9	164.9	160.0	158.1	156.1
80°	125.7	124.7	122.7	120.7	118.8
82.5°	90.3	89.3	87.4	86.4	86.4
85°	58.9	57.9	56.0	55.0	54.0
87.5°	30.4	28.5	27.5	25.5	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)