

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: P242444

Luminaire Tested: **S123DR-S1000D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242444
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-S1000D930-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3147.0 lumens
Efficiency: N/A
Efficacy: 90.4 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

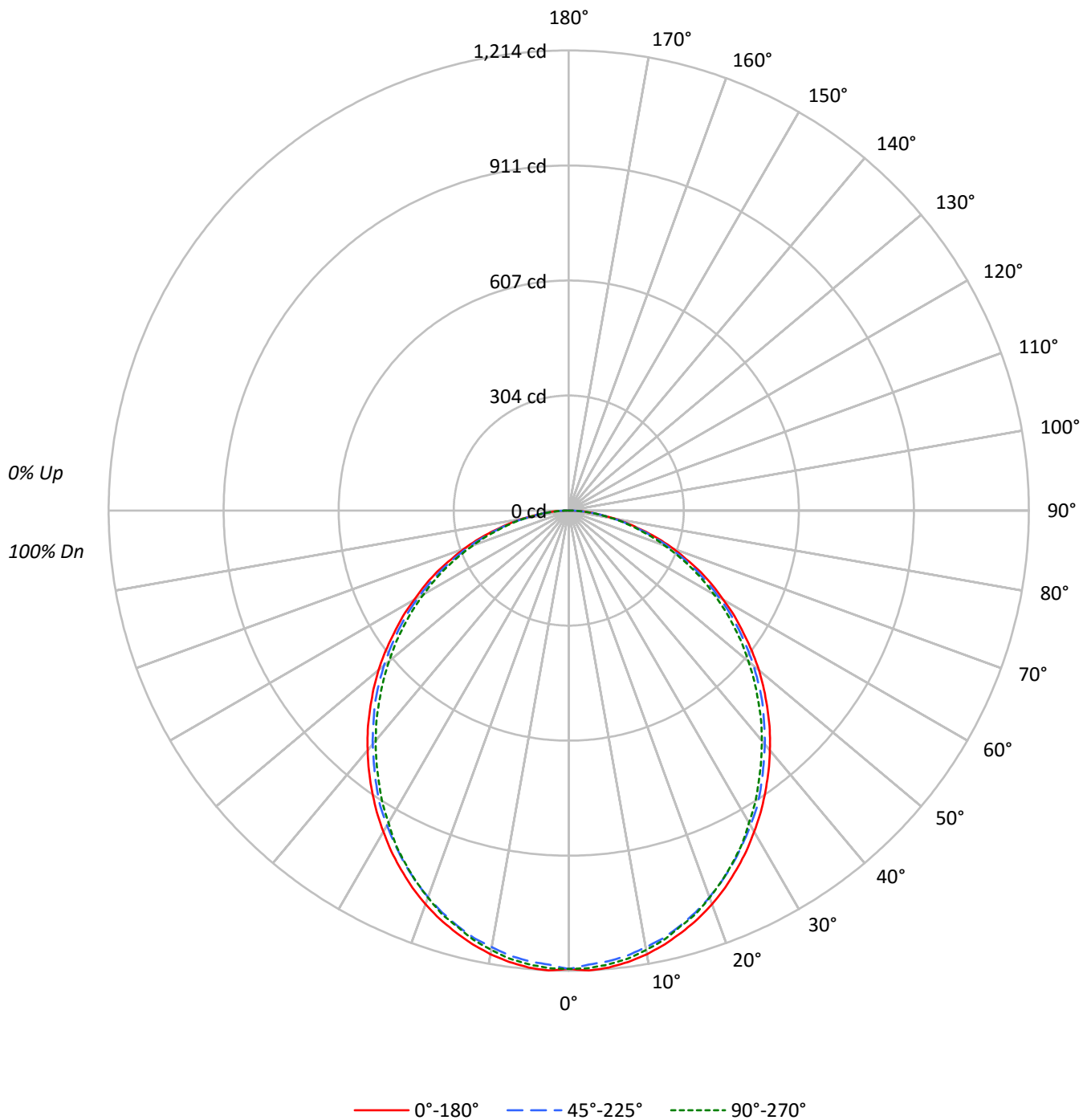
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P242444

CATALOG NUMBER: S123DR-S1000D930-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot



TEST NUMBER: P242444

CATALOG NUMBER: S123DR-S1000D930-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	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°	14657	14657	14657
5°	14725	14523	14624
10°	14627	14397	14486
15°	14456	14234	14260
20°	14256	14002	14015
25°	13988	13725	13697
30°	13694	13417	13315
35°	13384	13093	12924
40°	13062	12733	12537
45°	12707	12404	12102
50°	12352	11999	11665
55°	11887	11579	11228
60°	11418	11091	10737
65°	11005	10558	10228
70°	10391	9948	9505
75°	9493	9156	8762
80°	8565	8202	8125
85°	7524	7232	6940

TEST NUMBER: P242444

CATALOG NUMBER: S123DR-S1000D930-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.0	3.6
10°-20°	321.9	10.2
20°-30°	475.4	15.1
30°-40°	555.2	17.6
40°-50°	558.1	17.7
50°-60°	490.3	15.6
60°-70°	365.2	11.6
70°-80°	207.8	6.6
80°-90°	59.1	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°	911.3	29.0
0°-40°	1466.5	46.6
0°-60°	2514.9	79.9
0°-90°	3147.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3147.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1209	1209	1209	1209	1209	
5°	1210	1205	1194	1204	1202	115
15°	1152	1148	1134	1143	1136	325
25°	1046	1040	1026	1027	1024	482
35°	904	898	885	879	873	566
45°	741	737	724	711	706	572
55°	562	561	548	536	531	504
65°	384	378	368	360	357	379
75°	203	199	196	190	187	217
85°	54	52	52	50	50	62
90°	0	0	0	0	0	

TEST NUMBER: P242444

CATALOG NUMBER: S123DR-S1000D930-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1209.2	1209.2	1209.2	1209.2	1209.2
2.5°	1214.4	1210.2	1198.8	1209.2	1208.1
5°	1210.2	1205.0	1193.6	1204.0	1201.9
7.5°	1200.9	1195.7	1184.2	1193.6	1192.5
10°	1188.4	1183.2	1169.7	1179.0	1176.9
12.5°	1171.7	1167.6	1155.1	1161.4	1160.3
15°	1152.0	1147.8	1134.3	1142.6	1136.4
17.5°	1130.2	1125.0	1111.4	1117.7	1115.6
20°	1105.2	1099.0	1085.5	1089.6	1086.5
22.5°	1077.1	1070.9	1057.4	1060.5	1056.3
25°	1045.9	1039.7	1026.2	1027.2	1024.1
27.5°	1013.7	1007.5	992.9	994.0	990.8
30°	978.4	973.2	958.6	958.6	951.3
32.5°	943.0	935.7	925.3	918.1	914.9
35°	904.5	898.3	884.8	878.6	873.4
37.5°	866.1	857.8	844.2	837.0	833.8
40°	825.5	819.3	804.7	796.4	792.3
42.5°	785.0	777.7	763.1	754.8	750.7
45°	741.3	737.2	723.6	711.2	706.0
47.5°	698.7	692.4	680.0	667.5	663.3
50°	655.0	649.8	636.3	624.9	618.6
52.5°	609.3	606.1	591.6	582.2	576.0
55°	562.5	561.4	547.9	536.5	531.3
57.5°	518.8	514.7	504.3	493.9	487.6
60°	471.0	469.9	457.5	448.1	442.9
62.5°	428.4	425.2	412.8	403.4	400.3
65°	383.7	378.5	368.1	359.7	356.6
67.5°	335.8	331.7	323.3	316.1	311.9
70°	293.2	287.0	280.7	273.4	268.2
72.5°	248.5	244.3	237.1	230.8	228.7
75°	202.7	198.6	195.5	190.3	187.1
77.5°	162.2	160.1	156.0	151.8	151.8
80°	122.7	119.6	117.5	116.4	116.4
82.5°	84.2	84.2	84.2	82.1	81.1
85°	54.1	52.0	52.0	49.9	49.9
87.5°	27.0	23.9	22.9	21.8	21.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)