

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: P243314

Luminaire Tested: **S123DR-H1000D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243314
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-H1000D940-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3445.4 lumens
Efficiency: N/A
Efficacy: 109.4 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

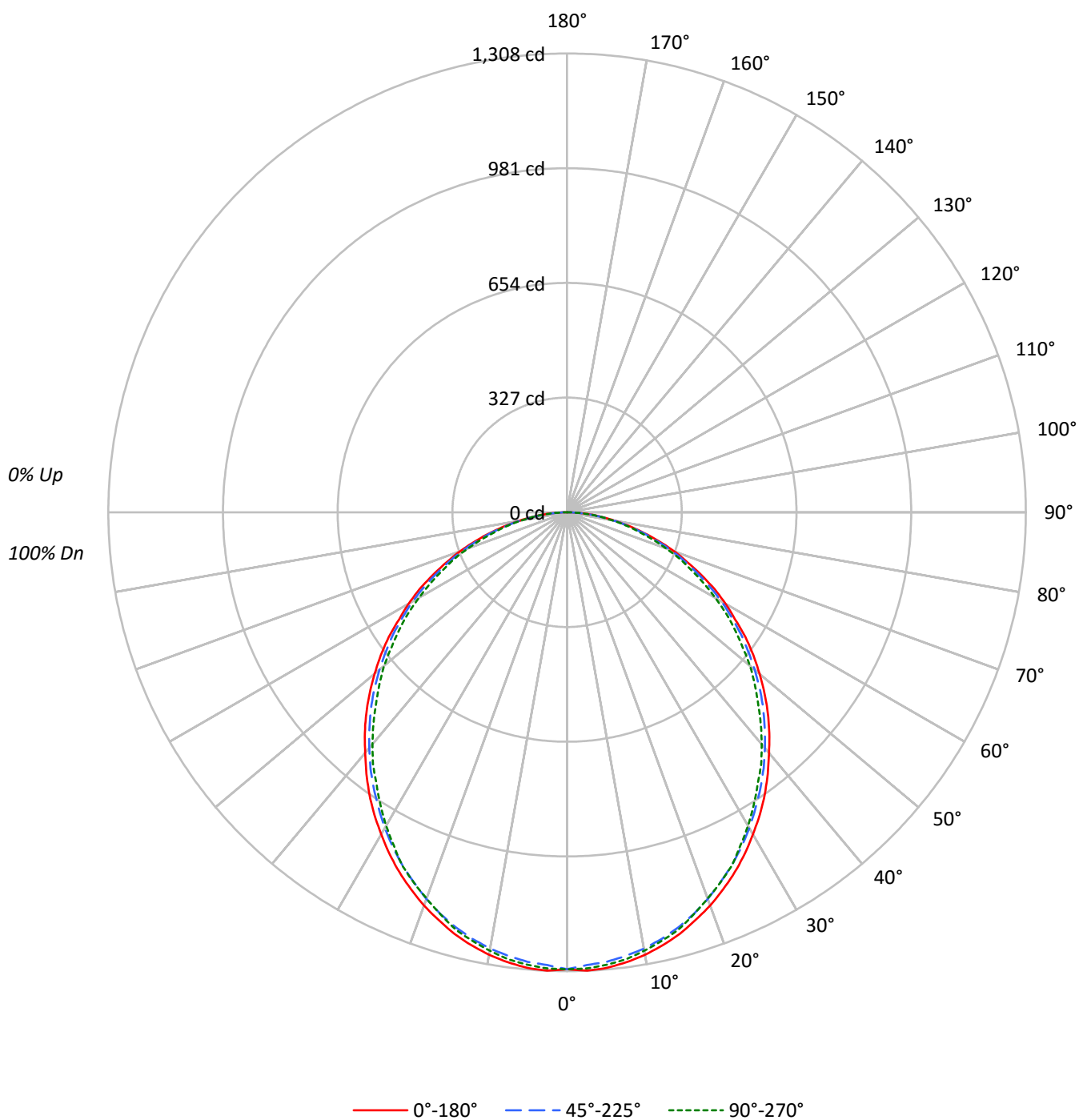
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94		97	94	91		94	91	89		90	88	86
2	99	91	84	78	96	89	83	77		85	80	76		82	78	74		79	75	72
3	90	80	72	65	88	78	71	65		75	69	64		73	67	62		70	65	61
4	83	71	62	55	80	70	61	55		67	60	54		65	59	54		63	57	53
5	76	63	54	48	74	62	54	48		60	53	47		58	52	47		56	51	46
6	70	57	48	42	69	56	48	42		54	47	41		53	46	41		51	45	41
7	65	52	43	37	64	51	43	37		50	42	37		48	41	36		47	41	36
8	61	47	39	33	59	47	39	33		45	38	33		44	37	33		43	37	32
9	57	44	35	30	56	43	35	30		42	35	30		41	34	29		40	34	29
10	53	40	32	27	52	40	32	27		39	32	27		38	31	27		37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15787	15787	15787
5°	15860	15651	15756
10°	15766	15542	15620
15°	15603	15374	15441
20°	15387	15124	15110
25°	15136	14848	14863
30°	14833	14548	14441
35°	14537	14220	14013
40°	14170	13880	13660
45°	13878	13547	13196
50°	13506	13160	12836
55°	13115	12775	12344
60°	12650	12313	11818
65°	12103	11734	11240
70°	11493	11110	10653
75°	10659	10359	9807
80°	9591	9368	9067
85°	8956	8511	8219

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.9	3.6
10°-20°	347.5	10.1
20°-30°	514.4	14.9
30°-40°	603.3	17.5
40°-50°	610.0	17.7
50°-60°	539.4	15.7
60°-70°	405.1	11.8
70°-80°	233.5	6.8
80°-90°	69.3	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°	984.8	28.6
0°-40°	1588.1	46.1
0°-60°	2737.5	79.5
0°-90°	3445.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3445.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1302	1302	1302	1302	1302	
5°	1304	1298	1286	1297	1295	124
15°	1243	1237	1225	1234	1230	350
25°	1132	1123	1110	1116	1111	521
35°	982	974	961	958	947	614
45°	810	803	790	780	770	624
55°	621	616	604	593	584	554
65°	422	419	409	398	392	418
75°	228	226	221	215	209	241
85°	64	63	61	60	59	72
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1302.4	1302.4	1302.4	1302.4	1302.4
2.5°	1307.8	1303.5	1291.7	1303.5	1301.3
5°	1303.5	1298.1	1286.3	1297.0	1294.9
7.5°	1293.8	1288.5	1275.6	1287.4	1285.2
10°	1280.9	1275.6	1262.7	1272.3	1269.1
12.5°	1263.8	1258.4	1245.5	1253.0	1250.9
15°	1243.4	1236.9	1225.1	1233.7	1230.5
17.5°	1218.7	1213.3	1200.4	1211.1	1201.5
20°	1192.9	1187.5	1172.5	1182.2	1171.4
22.5°	1162.8	1156.4	1141.4	1147.8	1142.4
25°	1131.7	1123.1	1110.2	1115.6	1111.3
27.5°	1097.3	1088.7	1075.9	1078.0	1070.5
30°	1059.8	1052.2	1039.4	1041.5	1031.8
32.5°	1022.2	1015.7	999.6	999.6	990.0
35°	982.4	973.9	961.0	957.7	947.0
37.5°	939.5	932.0	920.2	914.8	908.4
40°	895.5	891.2	877.2	870.8	863.3
42.5°	853.6	846.1	834.3	825.7	817.1
45°	809.6	803.1	790.3	779.5	769.8
47.5°	763.4	758.0	745.2	733.3	725.8
50°	716.2	711.9	697.9	685.0	680.7
52.5°	670.0	664.6	650.7	638.9	630.3
55°	620.6	616.3	604.5	592.7	584.1
57.5°	568.0	568.0	555.1	544.4	537.9
60°	521.8	516.5	507.9	496.1	487.5
62.5°	473.5	470.3	458.5	446.7	440.2
65°	422.0	418.7	409.1	398.3	391.9
67.5°	371.5	370.4	361.8	353.3	349.0
70°	324.3	322.1	313.5	304.9	300.6
72.5°	275.9	273.8	266.3	258.8	253.4
75°	227.6	225.5	221.2	214.7	209.4
77.5°	180.4	180.4	175.0	172.9	170.7
80°	137.4	136.4	134.2	132.1	129.9
82.5°	98.8	97.7	95.6	94.5	94.5
85°	64.4	63.3	61.2	60.1	59.1
87.5°	33.3	31.1	30.1	27.9	26.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)