

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: P243309

Luminaire Tested: **S123DR-H1000D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243309
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-H1000D935-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3326.8 lumens
Efficiency: N/A
Efficacy: 105.6 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

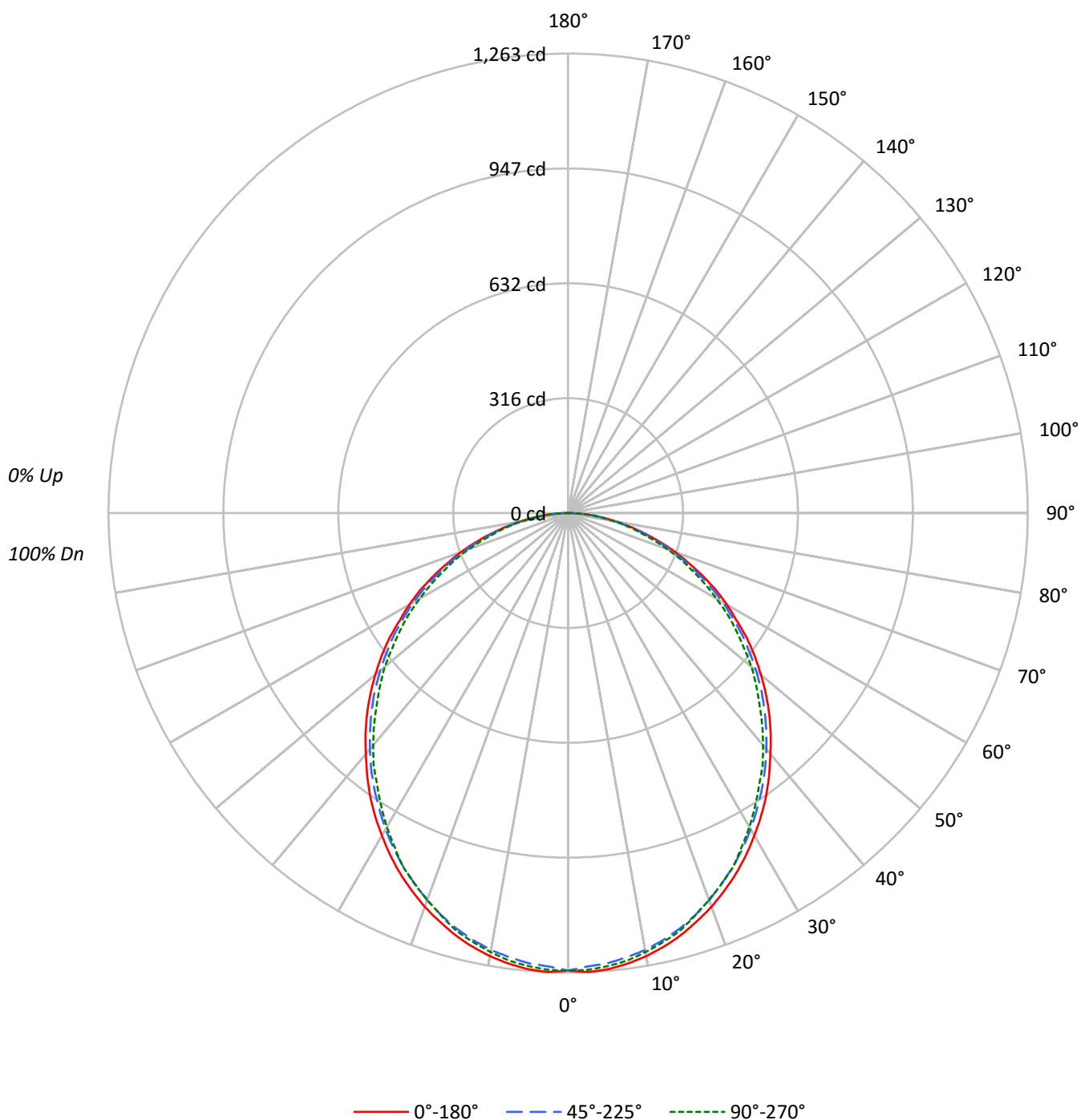
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	15244	15244	15244
5°	15314	15112	15213
10°	15223	15006	15082
15°	15065	14844	14909
20°	14857	14603	14590
25°	14614	14337	14351
30°	14322	14047	13945
35°	14037	13730	13531
40°	13681	13402	13189
45°	13400	13079	12742
50°	13040	12708	12395
55°	12663	12335	11919
60°	12216	11888	11411
65°	11685	11329	10853
70°	11096	10728	10288
75°	10294	10003	9470
80°	9263	9047	8753
85°	8650	8219	7927

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.6	3.6
10°-20°	335.5	10.1
20°-30°	496.7	14.9
30°-40°	582.6	17.5
40°-50°	588.9	17.7
50°-60°	520.9	15.7
60°-70°	391.2	11.8
70°-80°	225.5	6.8
80°-90°	66.9	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°	950.9	28.6
0°-40°	1533.4	46.1
0°-60°	2643.2	79.5
0°-90°	3326.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3326.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1258	1258	1258	1258	1258	
5°	1259	1253	1242	1252	1250	119
15°	1200	1194	1183	1191	1188	338
25°	1093	1084	1072	1077	1073	503
35°	949	940	928	925	914	593
45°	782	776	763	753	743	602
55°	599	595	584	572	564	535
65°	407	404	395	385	378	404
75°	220	218	214	207	202	233
85°	62	61	59	58	57	70
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1257.6	1257.6	1257.6	1257.6	1257.6
2.5°	1262.7	1258.6	1247.2	1258.6	1256.5
5°	1258.6	1253.4	1242.0	1252.4	1250.3
7.5°	1249.3	1244.1	1231.6	1243.0	1241.0
10°	1236.8	1231.6	1219.2	1228.5	1225.4
12.5°	1220.2	1215.0	1202.6	1209.9	1207.8
15°	1200.5	1194.3	1182.9	1191.2	1188.1
17.5°	1176.7	1171.5	1159.1	1169.4	1160.1
20°	1151.8	1146.6	1132.1	1141.4	1131.1
22.5°	1122.8	1116.6	1102.0	1108.3	1103.1
25°	1092.7	1084.4	1072.0	1077.2	1073.0
27.5°	1059.5	1051.2	1038.8	1040.9	1033.6
30°	1023.3	1016.0	1003.6	1005.6	996.3
32.5°	987.0	980.7	965.2	965.2	955.9
35°	948.6	940.3	927.9	924.8	914.4
37.5°	907.1	899.9	888.5	883.3	877.1
40°	864.6	860.5	847.0	840.8	833.5
42.5°	824.2	816.9	805.5	797.2	789.0
45°	781.7	775.5	763.0	752.7	743.3
47.5°	737.1	731.9	719.5	708.1	700.8
50°	691.5	687.4	673.9	661.4	657.3
52.5°	646.9	641.7	628.3	616.9	608.6
55°	599.2	595.1	583.7	572.3	564.0
57.5°	548.4	548.4	536.0	525.6	519.4
60°	503.9	498.7	490.4	479.0	470.7
62.5°	457.2	454.1	442.7	431.3	425.1
65°	407.4	404.3	395.0	384.6	378.4
67.5°	358.7	357.7	349.4	341.1	336.9
70°	313.1	311.0	302.7	294.4	290.3
72.5°	266.4	264.4	257.1	249.9	244.7
75°	219.8	217.7	213.6	207.3	202.2
77.5°	174.2	174.2	169.0	166.9	164.8
80°	132.7	131.7	129.6	127.5	125.4
82.5°	95.4	94.3	92.3	91.2	91.2
85°	62.2	61.2	59.1	58.1	57.0
87.5°	32.1	30.1	29.0	27.0	25.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)