

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: P243308

Luminaire Tested: **S123DR-H775D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243308
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-H775D935-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: 2579.6 lumens
Efficiency: N/A
Efficacy: 109.3 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

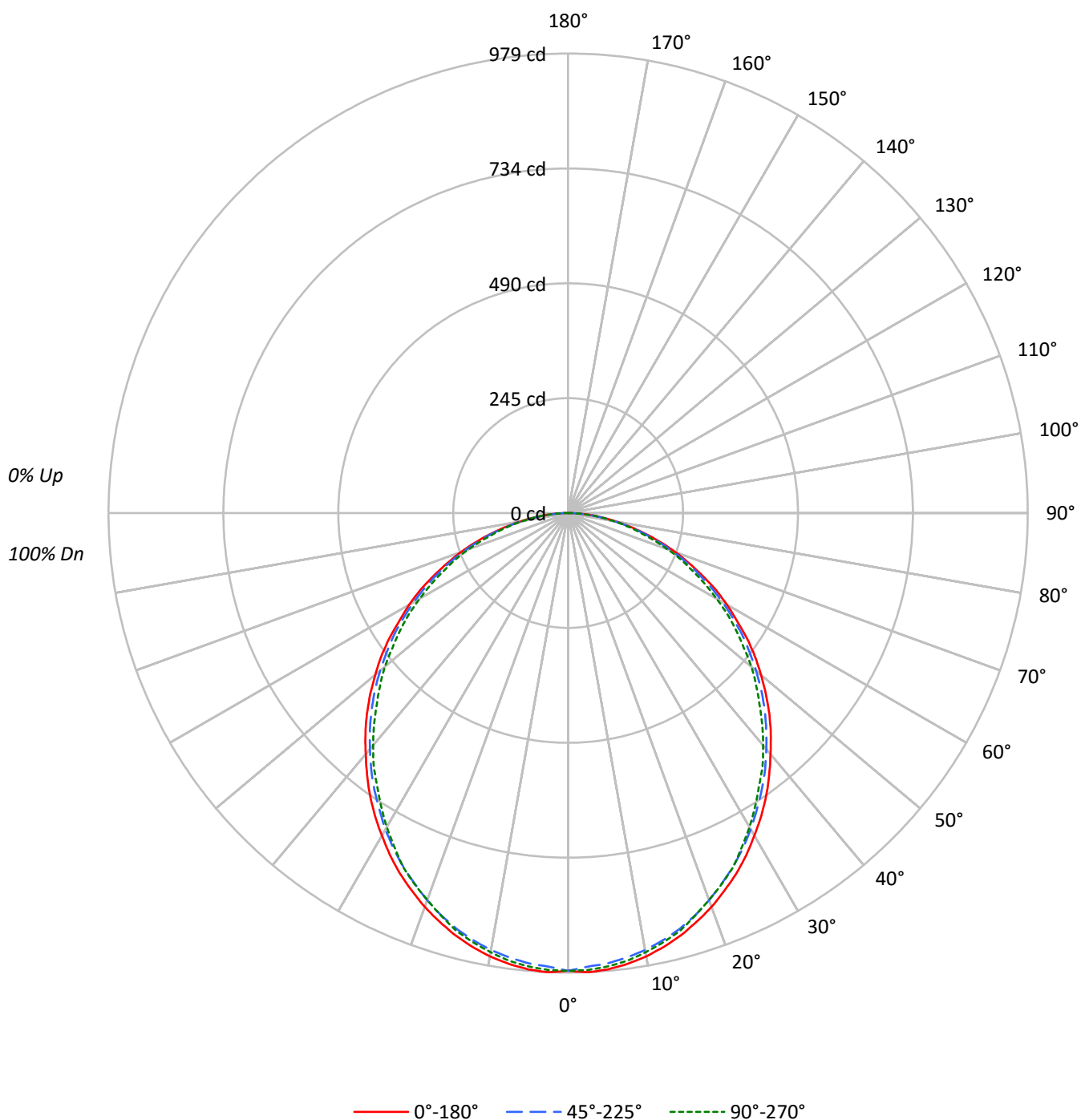
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	11819	11819	11819
5°	11874	11719	11796
10°	11805	11636	11695
15°	11682	11510	11561
20°	11520	11324	11314
25°	11332	11117	11127
30°	11105	10892	10812
35°	10885	10647	10491
40°	10609	10393	10226
45°	10390	10143	9881
50°	10111	9853	9612
55°	9820	9565	9241
60°	9472	9217	8848
65°	9060	8785	8415
70°	8605	8318	7978
75°	7980	7756	7343
80°	7183	7015	6792
85°	6703	6370	6147

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.0	3.6
10°-20°	260.2	10.1
20°-30°	385.2	14.9
30°-40°	451.7	17.5
40°-50°	456.7	17.7
50°-60°	403.9	15.7
60°-70°	303.3	11.8
70°-80°	174.8	6.8
80°-90°	51.8	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°	737.3	28.6
0°-40°	1189.0	46.1
0°-60°	2049.6	79.5
0°-90°	2579.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2579.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	975	975	975	975	975	
5°	976	972	963	971	970	93
15°	931	926	917	924	921	262
25°	847	841	831	835	832	390
35°	736	729	720	717	709	460
45°	606	601	592	584	576	467
55°	465	461	453	444	437	415
65°	316	314	306	298	293	313
75°	170	169	166	161	157	181
85°	48	47	46	45	44	54
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	975.1	975.1	975.1	975.1	975.1
2.5°	979.1	975.9	967.1	975.9	974.3
5°	975.9	971.9	963.1	971.1	969.5
7.5°	968.7	964.7	955.0	963.9	962.3
10°	959.1	955.0	945.4	952.6	950.2
12.5°	946.2	942.2	932.5	938.2	936.5
15°	930.9	926.1	917.2	923.7	921.3
17.5°	912.4	908.4	898.8	906.8	899.6
20°	893.1	889.1	877.9	885.1	877.1
22.5°	870.6	865.8	854.5	859.4	855.3
25°	847.3	840.9	831.2	835.3	832.0
27.5°	821.6	815.2	805.5	807.1	801.5
30°	793.4	787.8	778.2	779.8	772.5
32.5°	765.3	760.5	748.4	748.4	741.2
35°	735.6	729.1	719.5	717.1	709.0
37.5°	703.4	697.8	688.9	684.9	680.1
40°	670.5	667.2	656.8	652.0	646.3
42.5°	639.1	633.5	624.6	618.2	611.8
45°	606.1	601.3	591.7	583.6	576.4
47.5°	571.6	567.6	557.9	549.1	543.4
50°	536.2	533.0	522.5	512.9	509.7
52.5°	501.6	497.6	487.2	478.3	471.9
55°	464.7	461.4	452.6	443.8	437.3
57.5°	425.3	425.3	415.6	407.6	402.8
60°	390.7	386.7	380.2	371.4	365.0
62.5°	354.5	352.1	343.3	334.4	329.6
65°	315.9	313.5	306.3	298.2	293.4
67.5°	278.1	277.3	270.9	264.5	261.3
70°	242.8	241.2	234.7	228.3	225.1
72.5°	206.6	205.0	199.4	193.7	189.7
75°	170.4	168.8	165.6	160.8	156.8
77.5°	135.1	135.1	131.0	129.4	127.8
80°	102.9	102.1	100.5	98.9	97.3
82.5°	74.0	73.2	71.5	70.7	70.7
85°	48.2	47.4	45.8	45.0	44.2
87.5°	24.9	23.3	22.5	20.9	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)