

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: P243303

Luminaire Tested: **S123DR-H775D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243303
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-H775D930-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: 2442.7 lumens
Efficiency: N/A
Efficacy: 103.5 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

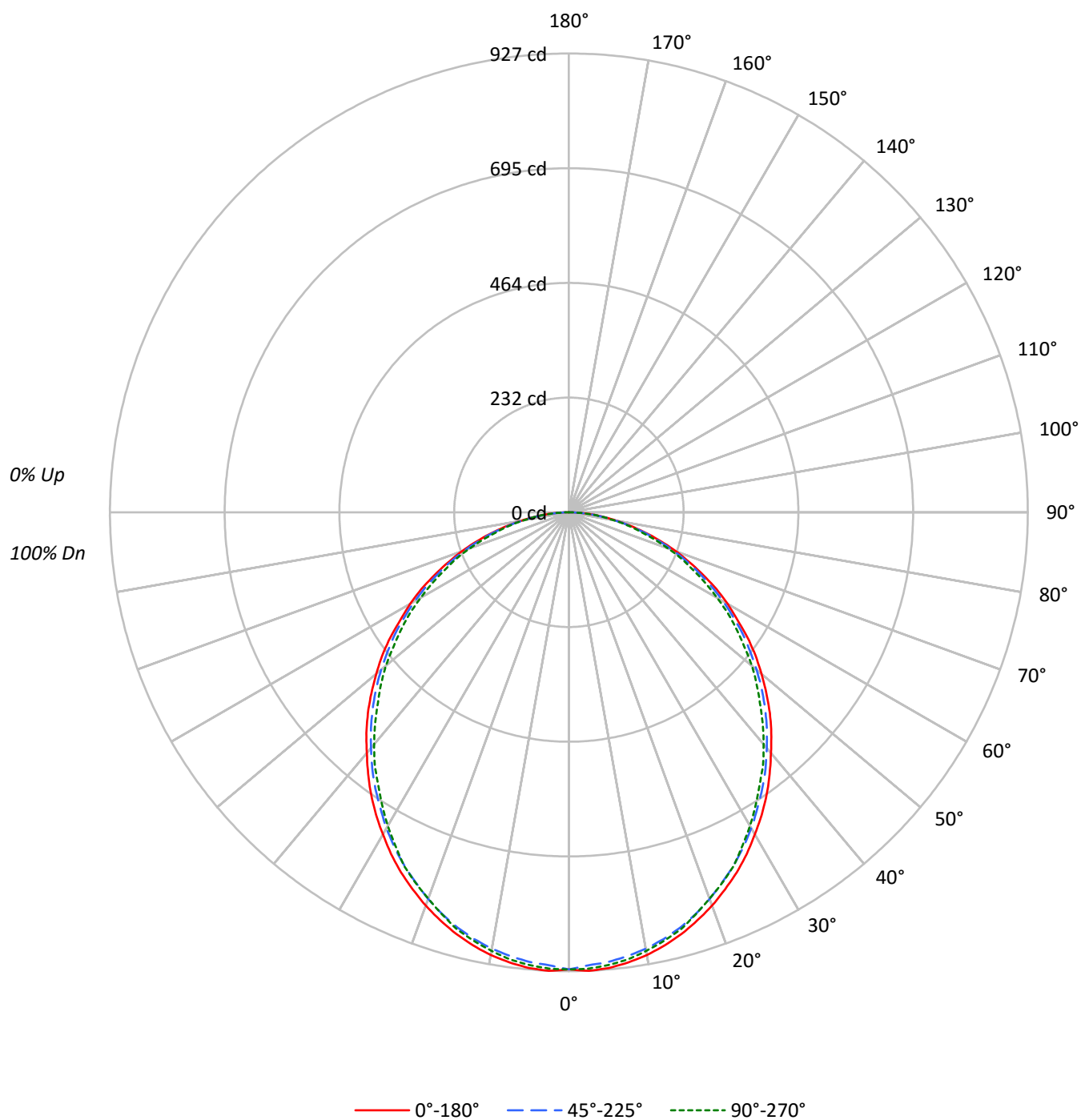
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					10
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°	11193	11193	11193
5°	11244	11097	11170
10°	11177	11018	11075
15°	11062	10900	10948
20°	10909	10723	10713
25°	10730	10527	10538
30°	10515	10314	10238
35°	10306	10081	9935
40°	10046	9840	9684
45°	9840	9605	9356
50°	9574	9331	9101
55°	9298	9057	8751
60°	8970	8730	8378
65°	8581	8318	7968
70°	8148	7878	7552
75°	7559	7343	6950
80°	6799	6645	6429
85°	6356	6036	5827

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.1	3.6
10°-20°	246.4	10.1
20°-30°	364.7	14.9
30°-40°	427.7	17.5
40°-50°	432.4	17.7
50°-60°	382.4	15.7
60°-70°	287.2	11.8
70°-80°	165.5	6.8
80°-90°	49.1	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°	698.2	28.6
0°-40°	1125.9	46.1
0°-60°	1940.8	79.5
0°-90°	2442.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2442.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	923	923	923	923	923	
5°	924	920	912	920	918	88
15°	882	877	869	875	872	248
25°	802	796	787	791	788	369
35°	696	690	681	679	671	435
45°	574	569	560	553	546	442
55°	440	437	429	420	414	393
65°	299	297	290	282	278	296
75°	161	160	157	152	148	171
85°	46	45	43	43	42	51
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	923.4	923.4	923.4	923.4	923.4
2.5°	927.2	924.1	915.8	924.1	922.6
5°	924.1	920.3	912.0	919.6	918.0
7.5°	917.3	913.5	904.3	912.7	911.2
10°	908.1	904.3	895.2	902.1	899.8
12.5°	896.0	892.2	883.0	888.4	886.8
15°	881.5	876.9	868.6	874.7	872.4
17.5°	864.0	860.2	851.1	858.7	851.8
20°	845.7	841.9	831.3	838.1	830.5
22.5°	824.4	819.8	809.2	813.8	809.9
25°	802.3	796.2	787.1	790.9	787.9
27.5°	778.0	771.9	762.8	764.3	758.9
30°	751.3	746.0	736.9	738.4	731.5
32.5°	724.7	720.1	708.7	708.7	701.9
35°	696.5	690.4	681.3	679.0	671.4
37.5°	666.1	660.7	652.4	648.6	644.0
40°	634.9	631.8	621.9	617.4	612.0
42.5°	605.2	599.8	591.5	585.4	579.3
45°	574.0	569.4	560.3	552.7	545.8
47.5°	541.2	537.4	528.3	519.9	514.6
50°	507.7	504.7	494.8	485.7	482.6
52.5°	475.0	471.2	461.3	452.9	446.8
55°	440.0	436.9	428.6	420.2	414.1
57.5°	402.7	402.7	393.6	385.9	381.4
60°	370.0	366.2	360.1	351.7	345.6
62.5°	335.7	333.4	325.0	316.7	312.1
65°	299.2	296.9	290.0	282.4	277.8
67.5°	263.4	262.6	256.5	250.4	247.4
70°	229.9	228.4	222.3	216.2	213.1
72.5°	195.6	194.1	188.8	183.5	179.7
75°	161.4	159.9	156.8	152.2	148.4
77.5°	127.9	127.9	124.1	122.6	121.0
80°	97.4	96.7	95.2	93.6	92.1
82.5°	70.0	69.3	67.7	67.0	67.0
85°	45.7	44.9	43.4	42.6	41.9
87.5°	23.6	22.1	21.3	19.8	19.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)