

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: P243284

Luminaire Tested: **S123DR-H775D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243284
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-H775D927-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2373.5 lumens
Efficiency: N/A
Efficacy: 100.6 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

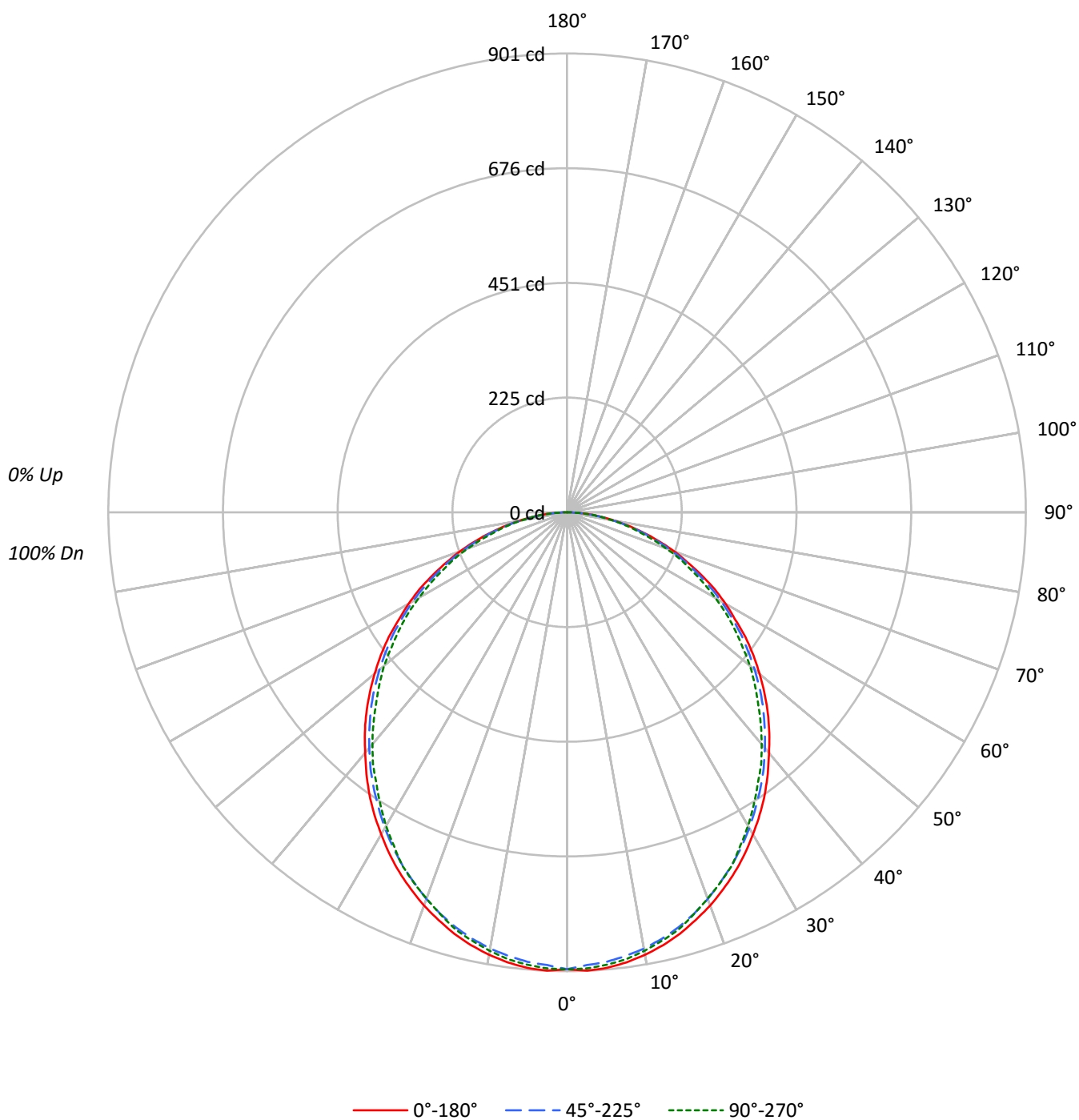
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84		
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	70		
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	59		
4	83	71	62	55	80	70	61	55	67	60	54	65	59	54	63	57	53	51		
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39		
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34		
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30		
9	57	44	35	30	56	43	35	30	42	35	30	41	34	29	40	34	29	27		
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10875	10875	10875
5°	10925	10782	10853
10°	10861	10706	10761
15°	10748	10590	10636
20°	10599	10419	10410
25°	10427	10229	10238
30°	10217	10021	9949
35°	10015	9796	9654
40°	9761	9562	9410
45°	9560	9332	9090
50°	9302	9067	8842
55°	9034	8800	8504
60°	8715	8482	8141
65°	8338	8082	7744
70°	7917	7655	7340
75°	7343	7137	6753
80°	6610	6457	6247
85°	6175	5869	5660

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.6	3.6
10°-20°	239.4	10.1
20°-30°	354.4	14.9
30°-40°	415.6	17.5
40°-50°	420.2	17.7
50°-60°	371.6	15.7
60°-70°	279.1	11.8
70°-80°	160.9	6.8
80°-90°	47.7	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°	678.4	28.6
0°-40°	1094.0	46.1
0°-60°	1885.8	79.5
0°-90°	2373.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2373.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	898	894	886	894	892	85
15°	856	852	844	850	848	241
25°	780	774	765	768	766	359
35°	677	671	662	660	652	423
45°	558	553	544	537	530	430
55°	428	425	416	408	402	382
65°	291	288	282	274	270	288
75°	157	155	152	148	144	166
85°	44	44	42	41	41	50
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	897.2	897.2	897.2	897.2	897.2
2.5°	900.9	897.9	889.8	897.9	896.5
5°	897.9	894.2	886.1	893.5	892.0
7.5°	891.3	887.6	878.7	886.8	885.4
10°	882.4	878.7	869.8	876.5	874.3
12.5°	870.6	866.9	858.0	863.2	861.7
15°	856.5	852.1	843.9	849.9	847.6
17.5°	839.5	835.8	826.9	834.3	827.7
20°	821.7	818.0	807.7	814.3	807.0
22.5°	801.0	796.6	786.2	790.7	787.0
25°	779.6	773.7	764.8	768.5	765.5
27.5°	755.9	750.0	741.1	742.6	737.4
30°	730.0	724.9	716.0	717.5	710.8
32.5°	704.1	699.7	688.6	688.6	682.0
35°	676.8	670.9	662.0	659.8	652.4
37.5°	647.2	642.0	633.9	630.2	625.7
40°	616.9	613.9	604.3	599.9	594.7
42.5°	588.0	582.8	574.7	568.8	562.9
45°	557.7	553.3	544.4	537.0	530.3
47.5°	525.9	522.2	513.3	505.2	500.0
50°	493.3	490.4	480.8	471.9	468.9
52.5°	461.5	457.8	448.2	440.1	434.2
55°	427.5	424.6	416.4	408.3	402.4
57.5°	391.3	391.3	382.4	375.0	370.6
60°	359.5	355.8	349.9	341.7	335.8
62.5°	326.2	324.0	315.8	307.7	303.3
65°	290.7	288.5	281.8	274.4	270.0
67.5°	255.9	255.2	249.3	243.3	240.4
70°	223.4	221.9	216.0	210.1	207.1
72.5°	190.1	188.6	183.4	178.3	174.6
75°	156.8	155.3	152.4	147.9	144.2
77.5°	124.3	124.3	120.6	119.1	117.6
80°	94.7	93.9	92.5	91.0	89.5
82.5°	68.0	67.3	65.8	65.1	65.1
85°	44.4	43.6	42.2	41.4	40.7
87.5°	22.9	21.4	20.7	19.2	18.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)