

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: P243283

Luminaire Tested: **S123DR-H560D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243283
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-H560D927-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: 1694.7 lumens
Efficiency: N/A
Efficacy: 98.5 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

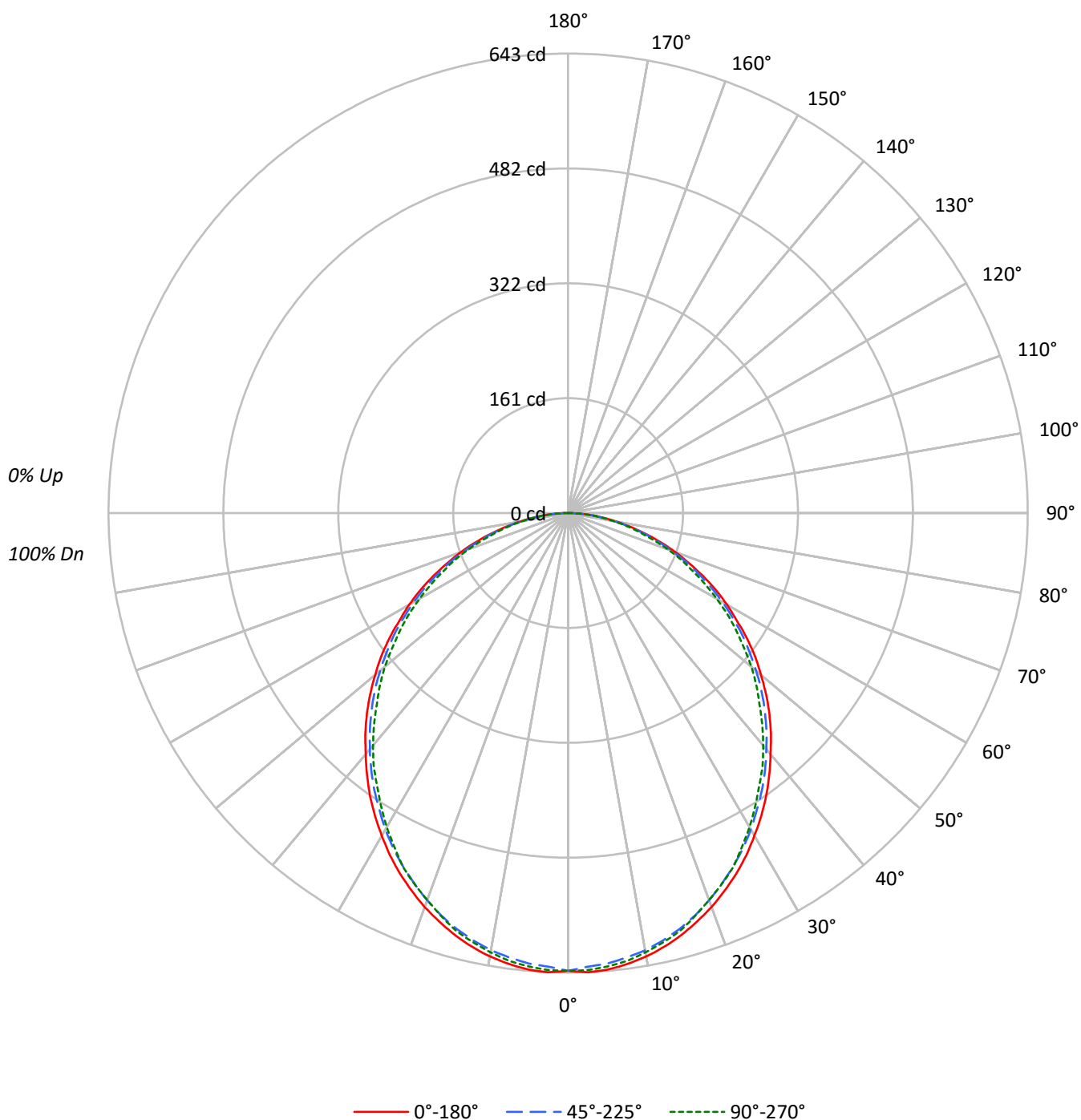
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7765	7765	7765
5°	7802	7698	7749
10°	7755	7645	7684
15°	7675	7562	7595
20°	7569	7439	7432
25°	7445	7304	7310
30°	7296	7155	7103
35°	7150	6995	6893
40°	6970	6828	6719
45°	6826	6663	6492
50°	6643	6474	6313
55°	6452	6283	6071
60°	6223	6056	5813
65°	5954	5771	5530
70°	5653	5465	5242
75°	5245	5095	4824
80°	4719	4607	4460
85°	4409	4186	4033

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.4	3.6
10°-20°	170.9	10.1
20°-30°	253.0	14.9
30°-40°	296.8	17.5
40°-50°	300.0	17.7
50°-60°	265.3	15.7
60°-70°	199.3	11.8
70°-80°	114.8	6.8
80°-90°	34.1	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°	484.4	28.6
0°-40°	781.2	46.1
0°-60°	1346.5	79.5
0°-90°	1694.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1694.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	641	641	641	641	641	
5°	641	638	633	638	637	61
15°	612	608	603	607	605	172
25°	557	552	546	549	547	256
35°	483	479	473	471	466	302
45°	398	395	389	383	379	307
55°	305	303	297	292	287	273
65°	208	206	201	196	193	206
75°	112	111	109	106	103	119
85°	32	31	30	30	29	36
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	640.6	640.6	640.6	640.6	640.6
2.5°	643.3	641.2	635.3	641.2	640.1
5°	641.2	638.5	632.7	638.0	636.9
7.5°	636.4	633.8	627.4	633.2	632.2
10°	630.1	627.4	621.1	625.8	624.3
12.5°	621.6	619.0	612.6	616.3	615.3
15°	611.6	608.4	602.6	606.8	605.2
17.5°	599.4	596.8	590.5	595.7	591.0
20°	586.8	584.1	576.7	581.5	576.2
22.5°	572.0	568.8	561.4	564.6	561.9
25°	556.7	552.4	546.1	548.7	546.6
27.5°	539.8	535.5	529.2	530.2	526.5
30°	521.3	517.6	511.2	512.3	507.5
32.5°	502.8	499.6	491.7	491.7	486.9
35°	483.2	479.0	472.7	471.1	465.8
37.5°	462.1	458.4	452.6	450.0	446.8
40°	440.5	438.4	431.5	428.3	424.6
42.5°	419.9	416.2	410.4	406.1	401.9
45°	398.2	395.0	388.7	383.4	378.7
47.5°	375.5	372.9	366.5	360.7	357.0
50°	352.3	350.2	343.3	336.9	334.8
52.5°	329.6	326.9	320.0	314.2	310.0
55°	305.3	303.1	297.3	291.5	287.3
57.5°	279.4	279.4	273.0	267.8	264.6
60°	256.7	254.0	249.8	244.0	239.8
62.5°	232.9	231.3	225.5	219.7	216.5
65°	207.6	206.0	201.2	195.9	192.8
67.5°	182.7	182.2	178.0	173.8	171.6
70°	159.5	158.4	154.2	150.0	147.9
72.5°	135.7	134.7	131.0	127.3	124.6
75°	112.0	110.9	108.8	105.6	103.0
77.5°	88.7	88.7	86.1	85.0	84.0
80°	67.6	67.1	66.0	65.0	63.9
82.5°	48.6	48.1	47.0	46.5	46.5
85°	31.7	31.2	30.1	29.6	29.0
87.5°	16.4	15.3	14.8	13.7	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)