

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: P243302

Luminaire Tested: **S123DR-H560D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243302
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-H560D930-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: 1744.2 lumens
Efficiency: N/A
Efficacy: 101.4 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

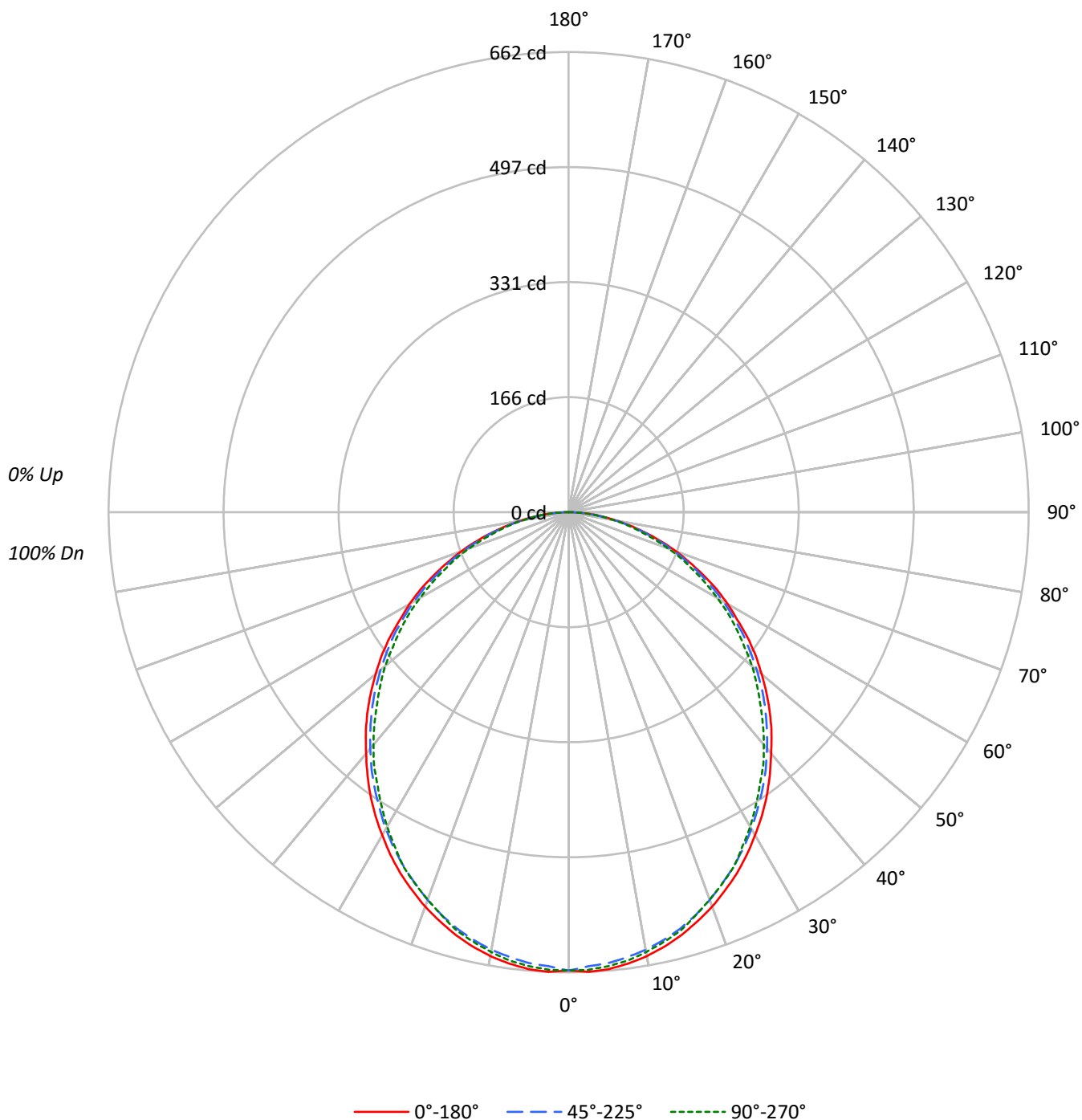
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7992	7992	7992
5°	8029	7923	7976
10°	7981	7867	7908
15°	7898	7783	7817
20°	7790	7657	7649
25°	7662	7516	7524
30°	7509	7365	7310
35°	7359	7199	7094
40°	7173	7027	6915
45°	7025	6857	6680
50°	6836	6662	6498
55°	6640	6467	6249
60°	6405	6233	5983
65°	6126	5940	5690
70°	5819	5624	5394
75°	5395	5245	4964
80°	4858	4740	4593
85°	4534	4311	4158

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.2	3.6
10°-20°	175.9	10.1
20°-30°	260.4	14.9
30°-40°	305.4	17.5
40°-50°	308.8	17.7
50°-60°	273.1	15.7
60°-70°	205.1	11.8
70°-80°	118.2	6.8
80°-90°	35.1	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°	498.5	28.6
0°-40°	803.9	46.1
0°-60°	1385.8	79.5
0°-90°	1744.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1744.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	659	659	659	659	659	
5°	660	657	651	657	656	63
15°	629	626	620	624	623	177
25°	573	568	562	565	563	264
35°	497	493	486	485	479	311
45°	410	407	400	395	390	316
55°	314	312	306	300	296	280
65°	214	212	207	202	198	212
75°	115	114	112	109	106	122
85°	33	32	31	30	30	37
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	659.3	659.3	659.3	659.3	659.3
2.5°	662.0	659.9	653.9	659.9	658.8
5°	659.9	657.1	651.2	656.6	655.5
7.5°	655.0	652.3	645.7	651.7	650.6
10°	648.4	645.7	639.2	644.1	642.5
12.5°	639.8	637.0	630.5	634.3	633.2
15°	629.4	626.2	620.2	624.5	622.9
17.5°	616.9	614.2	607.7	613.1	608.2
20°	603.9	601.2	593.6	598.4	593.0
22.5°	588.7	585.4	577.8	581.0	578.3
25°	572.9	568.5	562.0	564.7	562.6
27.5°	555.5	551.2	544.6	545.7	541.9
30°	536.5	532.7	526.2	527.2	522.3
32.5°	517.5	514.2	506.0	506.0	501.1
35°	497.3	493.0	486.5	484.8	479.4
37.5°	475.6	471.8	465.8	463.1	459.8
40°	453.3	451.1	444.1	440.8	437.0
42.5°	432.1	428.3	422.3	418.0	413.6
45°	409.8	406.6	400.0	394.6	389.7
47.5°	386.5	383.7	377.2	371.2	367.4
50°	362.5	360.4	353.3	346.8	344.6
52.5°	339.2	336.5	329.4	323.4	319.1
55°	314.2	312.0	306.0	300.0	295.7
57.5°	287.5	287.5	281.0	275.6	272.3
60°	264.2	261.4	257.1	251.1	246.8
62.5°	239.7	238.1	232.1	226.1	222.9
65°	213.6	212.0	207.1	201.7	198.4
67.5°	188.1	187.5	183.2	178.8	176.7
70°	164.2	163.1	158.7	154.4	152.2
72.5°	139.7	138.6	134.8	131.0	128.3
75°	115.2	114.1	112.0	108.7	106.0
77.5°	91.3	91.3	88.6	87.5	86.4
80°	69.6	69.0	67.9	66.9	65.8
82.5°	50.0	49.5	48.4	47.8	47.8
85°	32.6	32.1	31.0	30.4	29.9
87.5°	16.8	15.8	15.2	14.1	13.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)