

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: P243293

Luminaire Tested: **S123DR-H560D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243293
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-H560D835-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2139.3 lumens
Efficiency: N/A
Efficacy: 124.4 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

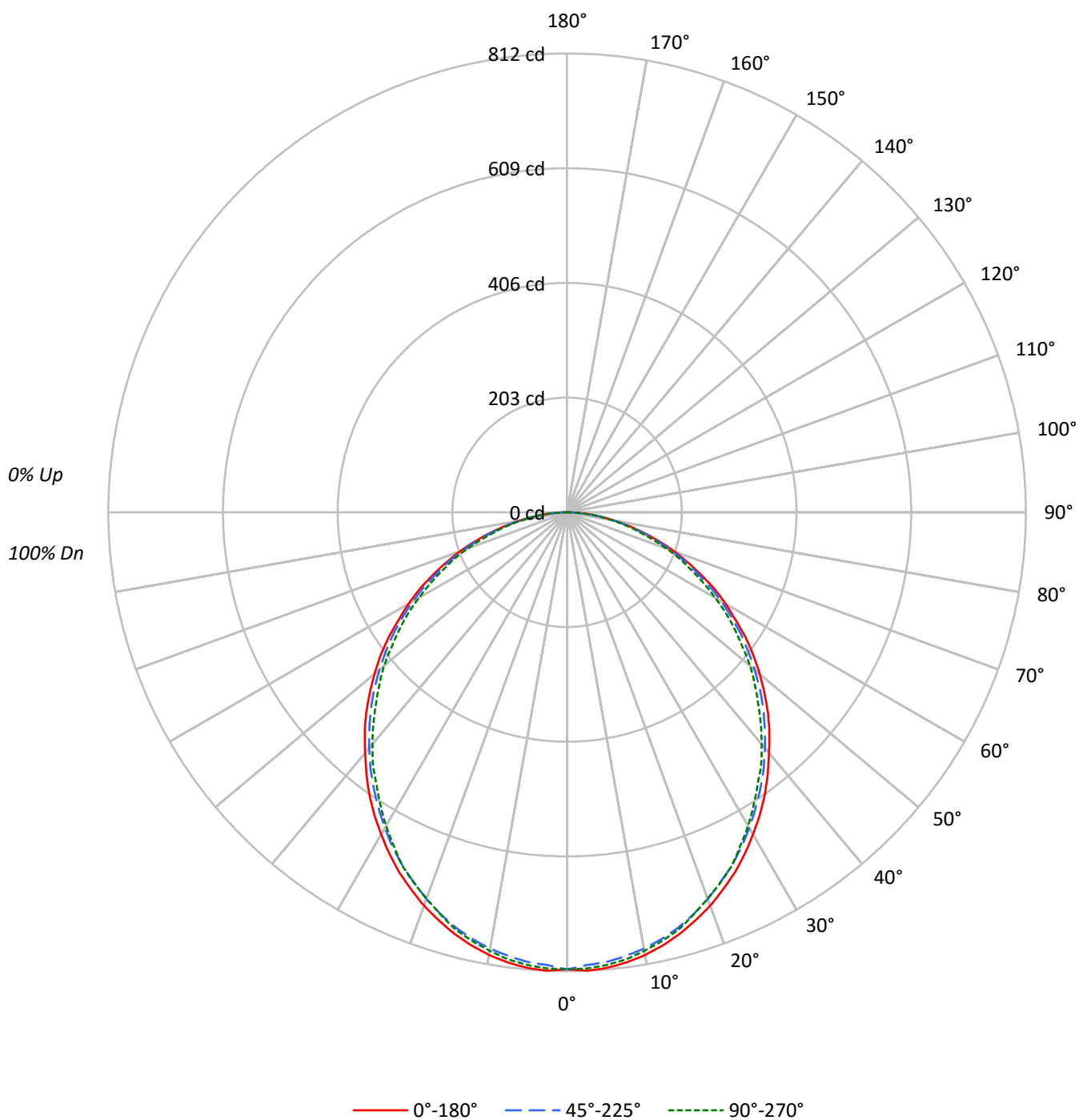
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	9802	9802	9802
5°	9848	9718	9783
10°	9790	9650	9699
15°	9688	9546	9587
20°	9554	9391	9382
25°	9398	9219	9228
30°	9210	9032	8967
35°	9026	8830	8701
40°	8798	8619	8481
45°	8617	8412	8194
50°	8386	8171	7971
55°	8142	7931	7665
60°	7855	7644	7338
65°	7514	7285	6978
70°	7134	6900	6617
75°	6617	6430	6088
80°	5954	5815	5633
85°	5563	5285	5104

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.3	3.6
10°-20°	215.8	10.1
20°-30°	319.4	14.9
30°-40°	374.6	17.5
40°-50°	378.7	17.7
50°-60°	334.9	15.7
60°-70°	251.6	11.8
70°-80°	145.0	6.8
80°-90°	43.0	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°	611.5	28.6
0°-40°	986.1	46.1
0°-60°	1699.8	79.5
0°-90°	2139.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2139.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	809	809	809	809	809	
5°	809	806	799	805	804	77
15°	772	768	761	766	764	218
25°	703	697	689	693	690	324
35°	610	605	597	595	588	381
45°	503	499	491	484	478	387
55°	385	383	375	368	363	344
65°	262	260	254	247	243	260
75°	141	140	137	133	130	150
85°	40	39	38	37	37	45
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	808.7	808.7	808.7	808.7	808.7
2.5°	812.0	809.4	802.0	809.4	808.0
5°	809.4	806.0	798.7	805.4	804.0
7.5°	803.4	800.0	792.0	799.4	798.0
10°	795.4	792.0	784.0	790.0	788.0
12.5°	784.7	781.4	773.4	778.0	776.7
15°	772.0	768.0	760.7	766.0	764.0
17.5°	756.7	753.4	745.4	752.0	746.0
20°	740.7	737.4	728.0	734.0	727.3
22.5°	722.0	718.0	708.7	712.7	709.3
25°	702.7	697.3	689.3	692.7	690.0
27.5°	681.3	676.0	668.0	669.3	664.7
30°	658.0	653.3	645.3	646.7	640.7
32.5°	634.7	630.7	620.7	620.7	614.7
35°	610.0	604.7	596.7	594.7	588.0
37.5°	583.3	578.7	571.3	568.0	564.0
40°	556.0	553.3	544.7	540.7	536.0
42.5°	530.0	525.3	518.0	512.7	507.3
45°	502.7	498.7	490.7	484.0	478.0
47.5°	474.0	470.7	462.7	455.3	450.7
50°	444.7	442.0	433.3	425.3	422.7
52.5°	416.0	412.7	404.0	396.7	391.3
55°	385.3	382.7	375.3	368.0	362.7
57.5°	352.7	352.7	344.7	338.0	334.0
60°	324.0	320.7	315.3	308.0	302.7
62.5°	294.0	292.0	284.7	277.3	273.3
65°	262.0	260.0	254.0	247.3	243.3
67.5°	230.7	230.0	224.7	219.3	216.7
70°	201.3	200.0	194.7	189.3	186.7
72.5°	171.3	170.0	165.3	160.7	157.3
75°	141.3	140.0	137.3	133.3	130.0
77.5°	112.0	112.0	108.7	107.3	106.0
80°	85.3	84.7	83.3	82.0	80.7
82.5°	61.3	60.7	59.3	58.7	58.7
85°	40.0	39.3	38.0	37.3	36.7
87.5°	20.7	19.3	18.7	17.3	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)