

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: P242856

Luminaire Tested: **S125DR-S850D930-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242856
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DR-S850D930-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2576.1 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.88' x H: 0.08')
CIE Type: Direct

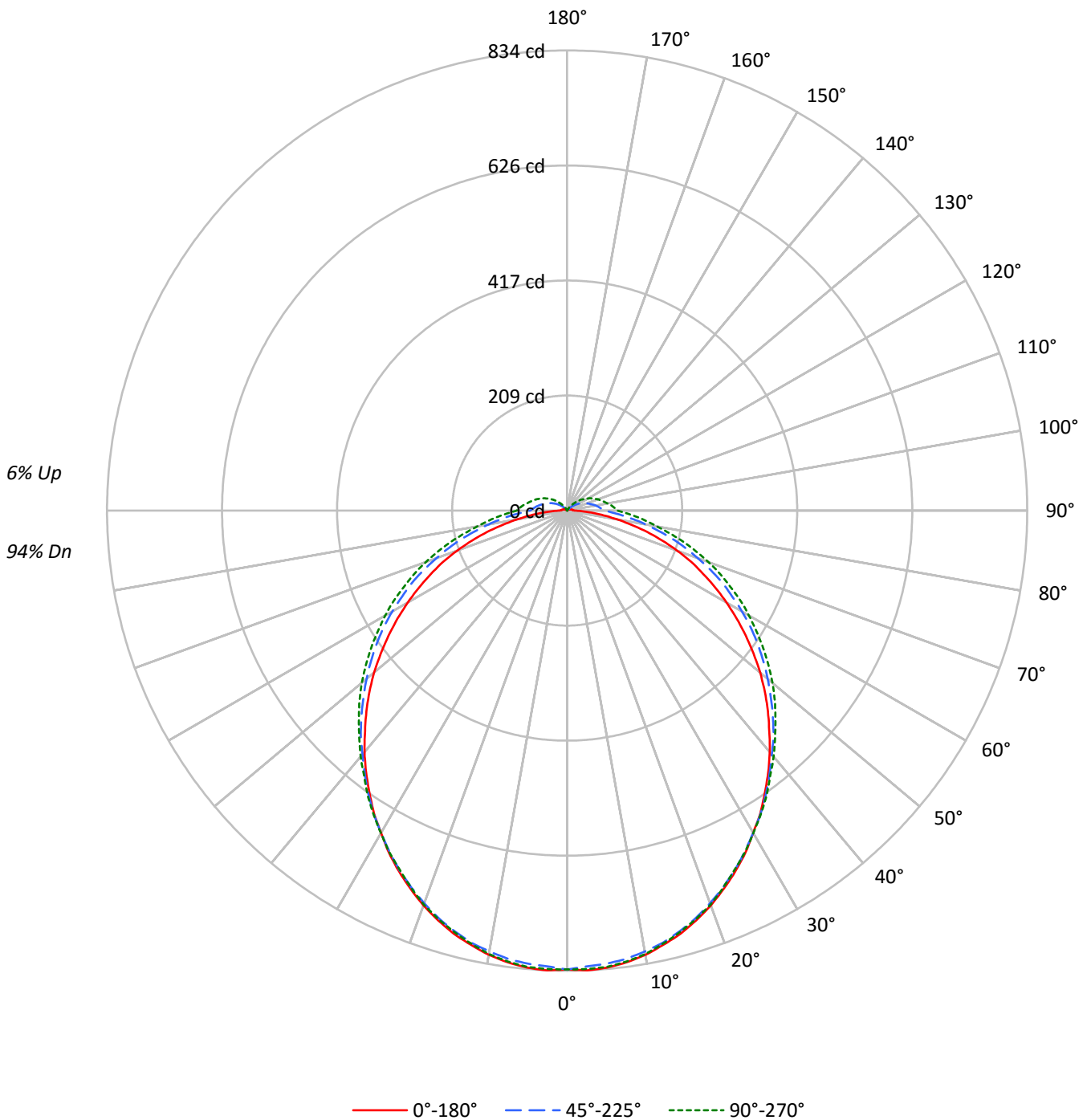
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94
1	106	101	96	92	103	98	94	90	93	89	86	88	85	82	83	81	79	76
2	96	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65	63
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	53
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47	45
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41	39
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32	30
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	27
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5910	5910	5910
5°	5922	5797	5813
10°	5879	5688	5676
15°	5810	5560	5504
20°	5715	5402	5334
25°	5602	5234	5124
30°	5466	5050	4933
35°	5338	4880	4758
40°	5208	4701	4581
45°	5063	4547	4424
50°	4923	4380	4284
55°	4754	4222	4120
60°	4570	4042	3952
65°	4378	3852	3763
70°	4160	3595	3568
75°	3813	3346	3329
80°	3360	3042	3066
85°	2933	2823	2959



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.7	3.1
10°-20°	223.4	8.7
20°-30°	332.2	12.9
30°-40°	393.4	15.3
40°-50°	406.7	15.8
50°-60°	374.7	14.5
60°-70°	302.9	11.8
70°-80°	202.7	7.9
80°-90°	104.7	4.1
90°-100°	59.0	2.3
100°-110°	43.5	1.7
110°-120°	29.1	1.1
120°-130°	16.5	0.6
130°-140°	7.2	0.3
140°-150°	1.4	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	634.3	24.6
0°-40°	1027.7	39.9
0°-60°	1809.1	70.2
0°-90°	2419.4	93.9
90°-120°	131.6	5.1
90°-150°	156.7	6.1
90°-180°	157.0	6.1
0°-180°	2576.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	832	832	832	832	832	
5°	832	830	824	831	830	79
15°	794	795	789	794	791	224
25°	722	724	719	722	718	332
35°	624	630	628	630	630	391
45°	514	523	528	533	534	397
55°	395	408	422	430	434	353
65°	272	291	311	323	326	270
75°	150	171	197	214	218	159
85°	45	72	100	118	125	47
90°	13	39	67	86	91	9
95°	11	32	60	78	83	8
105°	7	20	45	61	67	8
115°	5	11	32	46	51	5
125°	3	2	19	32	36	3
135°	2	1	6	17	21	1
145°	1	0	0	4	7	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	831.6	831.6	831.6	831.6	831.6
2.5°	834.1	832.4	826.7	832.4	831.6
5°	831.6	830.0	824.3	830.8	830.0
7.5°	825.9	825.1	819.4	825.1	824.3
10°	817.7	817.7	811.2	816.9	816.1
12.5°	806.3	807.1	802.3	806.3	803.9
15°	794.1	794.9	789.2	794.1	790.8
17.5°	778.6	780.2	774.5	778.6	776.2
20°	761.5	763.1	757.4	759.9	759.9
22.5°	741.9	745.2	738.7	741.9	739.5
25°	721.5	724.0	719.1	722.4	718.3
27.5°	699.5	702.8	697.1	699.5	697.9
30°	674.3	679.1	674.3	675.9	675.1
32.5°	651.4	655.5	652.2	653.9	653.1
35°	624.5	630.2	627.8	630.2	630.2
37.5°	598.4	603.3	602.5	605.8	605.0
40°	571.5	578.0	577.2	580.5	582.1
42.5°	542.2	551.1	553.6	557.7	557.7
45°	514.5	523.4	527.5	533.2	534.0
47.5°	485.9	494.1	500.6	508.7	510.4
50°	456.6	465.5	474.5	483.5	485.9
52.5°	425.6	437.0	448.4	458.2	459.8
55°	395.4	408.5	421.5	430.5	433.7
57.5°	364.4	379.9	394.6	404.4	406.8
60°	333.5	349.8	366.1	378.3	380.7
62.5°	303.3	319.6	337.5	351.4	354.7
65°	272.3	291.1	310.6	322.9	326.1
67.5°	243.8	261.7	281.3	296.0	300.0
70°	212.0	230.7	251.9	267.4	272.3
72.5°	181.0	200.6	224.2	241.3	244.6
75°	150.0	171.2	197.3	213.6	217.7
77.5°	119.8	144.3	168.8	186.7	190.0
80°	92.1	116.6	144.3	162.2	165.5
82.5°	66.9	92.9	121.5	138.6	145.1
85°	44.8	71.7	100.3	118.2	124.7
87.5°	28.5	54.6	82.3	101.1	106.8
90°	13.0	39.1	66.9	85.6	91.3
92.5°	11.4	35.1	63.6	81.5	87.2
95°	10.6	31.8	59.5	77.5	83.2
97.5°	9.8	29.4	56.3	73.4	79.1
100°	9.0	26.1	52.2	69.3	74.2
102.5°	8.2	23.6	48.9	65.2	70.1
105°	7.3	20.4	44.8	61.1	66.9
107.5°	6.5	17.9	41.6	57.9	62.8
110°	5.7	15.5	38.3	53.8	59.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.7	13.0	35.1	49.7	55.4
115°	4.9	10.6	31.8	46.5	51.4
117.5°	4.1	8.2	28.5	42.4	48.1
120°	4.1	6.5	25.3	39.1	44.0
122.5°	3.3	4.1	22.0	35.1	39.9
125°	3.3	2.4	18.8	31.8	35.9
127.5°	2.4	1.6	15.5	27.7	32.6
130°	2.4	1.6	13.0	24.5	28.5
132.5°	1.6	1.6	9.8	21.2	24.5
135°	1.6	0.8	6.5	17.1	21.2
137.5°	1.6	0.8	4.1	13.9	17.1
140°	0.8	0.8	1.6	10.6	13.9
142.5°	0.8	0.0	0.0	7.3	10.6
145°	0.8	0.0	0.0	4.1	7.3
147.5°	0.0	0.0	0.0	1.6	3.3
150°	0.0	0.0	0.0	0.0	0.8
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)