

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: P243726

Luminaire Tested: **S125DR-H850D940-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243726
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-56)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DR-H850D940-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2797.1 lumens
Efficiency: N/A
Efficacy: 118.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.88' x H: 0.08')
CIE Type: Direct

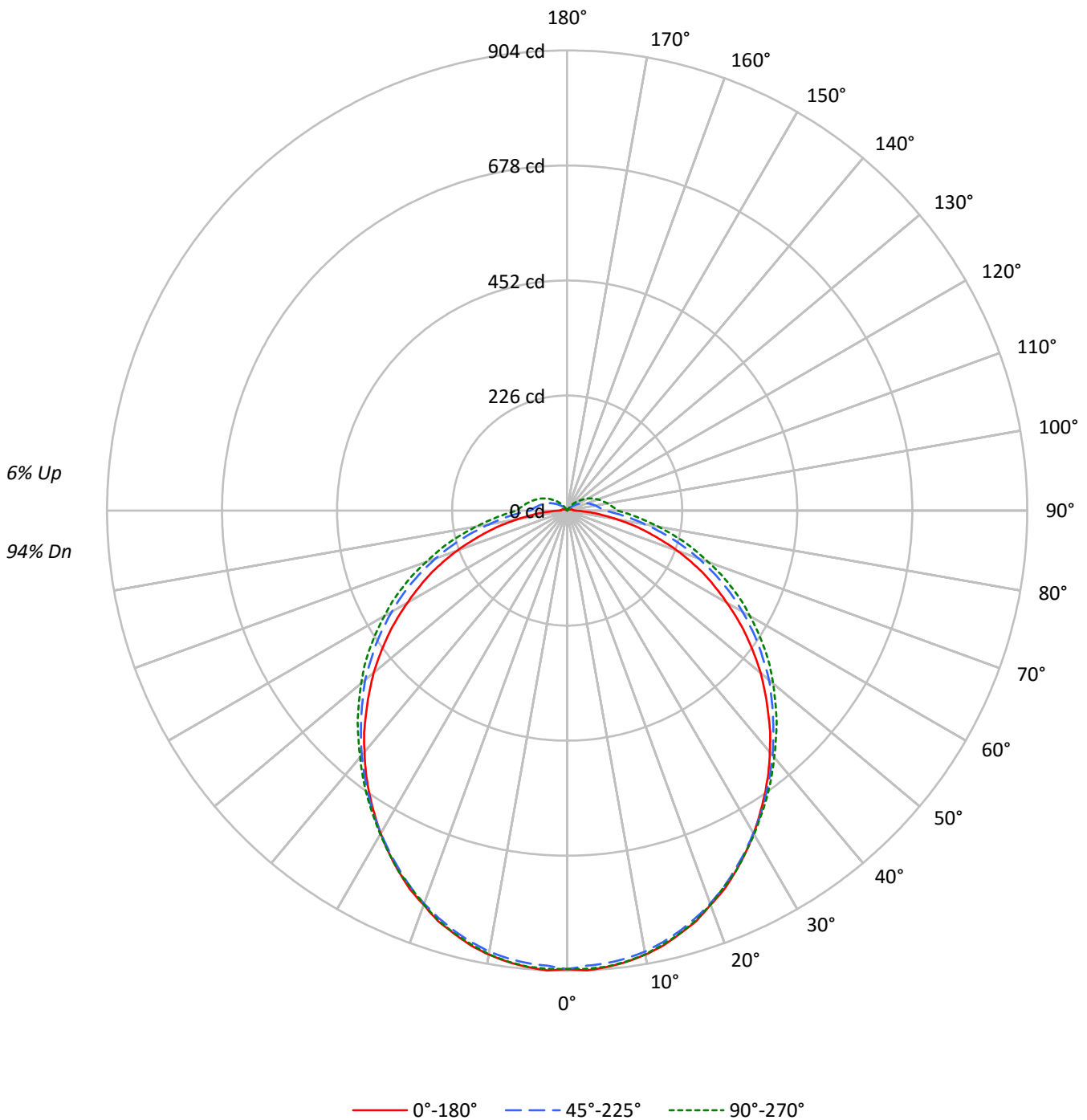
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6402	6402	6402
5°	6409	6276	6298
10°	6369	6170	6156
15°	6292	6024	5980
20°	6185	5861	5779
25°	6076	5672	5582
30°	5939	5481	5366
35°	5793	5293	5173
40°	5645	5113	4980
45°	5489	4931	4822
50°	5349	4781	4654
55°	5174	4595	4500
60°	4964	4394	4304
65°	4792	4182	4112
70°	4509	3921	3862
75°	4128	3614	3641
80°	3674	3283	3363
85°	3273	3071	3201



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.2	3.0
10°-20°	242.2	8.7
20°-30°	360.5	12.9
30°-40°	427.1	15.3
40°-50°	441.9	15.8
50°-60°	407.6	14.6
60°-70°	329.4	11.8
70°-80°	220.1	7.9
80°-90°	113.5	4.1
90°-100°	63.7	2.3
100°-110°	47.3	1.7
110°-120°	31.5	1.1
120°-130°	17.6	0.6
130°-140°	7.9	0.3
140°-150°	1.7	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	687.9	24.6
0°-40°	1115.0	39.9
0°-60°	1964.5	70.2
0°-90°	2627.6	93.9
90°-120°	142.4	5.1
90°-150°	169.6	6.1
90°-180°	170.0	6.1
0°-180°	2797.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	901	901	901	901	901	
5°	900	899	892	899	899	85
15°	860	862	855	860	859	243
25°	783	786	779	784	783	360
35°	678	683	681	684	685	424
45°	558	567	572	581	582	431
55°	430	444	459	470	474	385
65°	298	316	337	352	356	294
75°	162	186	213	232	238	172
85°	50	78	109	128	135	51
90°	14	42	72	92	99	10
95°	12	35	64	83	89	9
105°	8	22	49	67	72	9
115°	6	12	34	50	56	5
125°	3	3	20	32	38	3
135°	2	2	8	19	22	1
145°	1	0	0	5	8	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°	900.8	900.8	900.8	900.8	900.8
2.5°	904.2	901.7	895.0	901.7	900.8
5°	900.0	899.2	892.5	899.2	899.2
7.5°	894.2	893.4	887.5	894.2	893.4
10°	885.9	885.9	880.0	885.0	885.0
12.5°	875.0	875.0	868.4	874.2	872.5
15°	860.0	862.5	855.1	860.0	859.2
17.5°	845.1	845.1	839.2	843.4	843.4
20°	824.2	827.6	821.7	825.9	823.4
22.5°	805.9	807.6	801.8	805.9	801.8
25°	782.6	785.9	779.3	783.5	782.6
27.5°	758.5	761.0	756.0	761.0	758.5
30°	732.7	735.2	731.8	735.2	734.3
32.5°	705.2	710.2	707.7	710.2	709.4
35°	677.7	682.7	681.0	684.4	685.2
37.5°	649.4	654.4	654.4	658.6	659.4
40°	619.4	626.1	627.8	633.6	632.8
42.5°	590.3	597.0	599.5	606.9	606.9
45°	557.8	567.0	572.0	581.1	582.0
47.5°	527.0	537.0	544.5	552.8	554.5
50°	496.2	505.4	517.9	526.2	527.9
52.5°	462.9	474.6	487.1	498.7	502.0
55°	430.4	443.8	458.7	469.6	473.7
57.5°	397.1	411.3	427.9	441.3	444.6
60°	362.2	378.8	398.0	411.3	414.6
62.5°	329.7	348.0	368.0	382.2	387.1
65°	298.1	315.5	337.2	352.2	356.3
67.5°	263.9	283.1	305.6	322.2	326.4
70°	229.8	250.6	274.7	290.6	294.7
72.5°	194.8	218.1	243.9	261.4	266.4
75°	162.4	186.5	213.1	231.5	238.1
77.5°	131.5	156.5	183.2	202.3	208.1
80°	100.7	126.6	155.7	175.7	181.5
82.5°	73.3	100.7	130.7	150.7	156.5
85°	50.0	78.3	109.1	128.2	134.9
87.5°	30.8	58.3	89.9	109.1	115.7
90°	14.2	41.6	72.4	92.4	99.1
92.5°	12.5	38.3	68.3	88.3	94.1
95°	11.7	35.0	64.1	83.3	89.1
97.5°	10.8	31.6	59.9	79.1	84.9
100°	10.0	28.3	56.6	74.9	80.8
102.5°	9.2	25.8	52.5	70.8	75.8
105°	8.3	22.5	49.1	66.6	72.4
107.5°	7.5	19.1	45.8	62.4	68.3
110°	6.7	16.7	41.6	58.3	64.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.8	14.2	38.3	54.1	59.9
115°	5.8	11.7	34.1	50.0	55.8
117.5°	5.0	9.2	30.0	45.8	51.6
120°	4.2	6.7	26.6	41.6	47.5
122.5°	4.2	5.0	23.3	37.5	43.3
125°	3.3	3.3	20.0	32.5	38.3
127.5°	3.3	2.5	16.7	29.1	33.3
130°	2.5	1.7	14.2	25.8	30.0
132.5°	2.5	1.7	10.8	22.5	26.6
135°	1.7	1.7	7.5	19.1	22.5
137.5°	1.7	0.8	5.0	15.0	19.1
140°	0.8	0.8	1.7	11.7	15.0
142.5°	0.8	0.8	0.8	8.3	11.7
145°	0.8	0.0	0.0	5.0	7.5
147.5°	0.8	0.0	0.0	1.7	4.2
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)