

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: P243716

Luminaire Tested: **S125DR-H850D930-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243716
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-H850D930-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP 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: 2557.4 lumens
Efficiency: N/A
Efficacy: 108.4 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

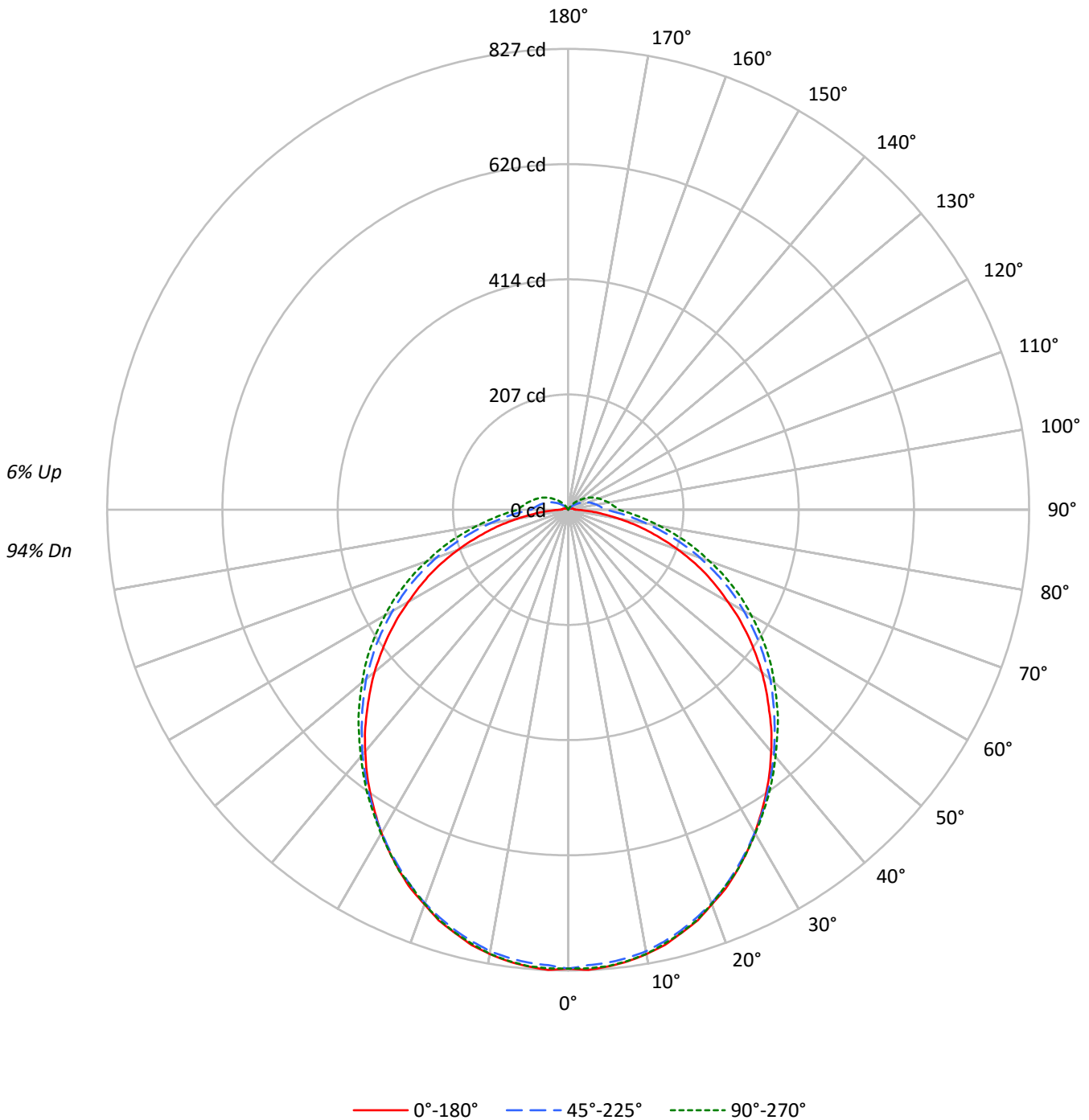
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5854	5854	5854
5°	5860	5738	5758
10°	5823	5642	5628
15°	5752	5508	5468
20°	5656	5359	5284
25°	5556	5186	5104
30°	5430	5011	4906
35°	5296	4840	4730
40°	5162	4675	4553
45°	5018	4509	4408
50°	4891	4371	4255
55°	4732	4201	4114
60°	4537	4018	3935
65°	4381	3824	3760
70°	4122	3585	3532
75°	3772	3305	3329
80°	3360	3000	3074
85°	2991	2806	2925



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.9	3.0
10°-20°	221.4	8.7
20°-30°	329.6	12.9
30°-40°	390.5	15.3
40°-50°	404.0	15.8
50°-60°	372.7	14.6
60°-70°	301.2	11.8
70°-80°	201.2	7.9
80°-90°	103.8	4.1
90°-100°	58.2	2.3
100°-110°	43.2	1.7
110°-120°	28.8	1.1
120°-130°	16.1	0.6
130°-140°	7.2	0.3
140°-150°	1.5	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	629.0	24.6
0°-40°	1019.5	39.9
0°-60°	1796.2	70.2
0°-90°	2402.4	93.9
90°-120°	130.2	5.1
90°-150°	155.0	6.1
90°-180°	155.0	6.1
0°-180°	2557.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	824	824	824	824	824	
5°	823	822	816	822	822	78
15°	786	789	782	786	786	222
25°	716	719	712	716	716	330
35°	620	624	623	626	626	388
45°	510	518	523	531	532	394
55°	394	406	419	429	433	352
65°	272	288	308	322	326	269
75°	148	170	195	212	218	158
85°	46	72	100	117	123	47
90°	13	38	66	84	91	9
95°	11	32	59	76	82	8
105°	8	21	45	61	66	8
115°	5	11	31	46	51	5
125°	3	3	18	30	35	3
135°	2	2	7	18	21	1
145°	1	0	0	5	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°	823.6	823.6	823.6	823.6	823.6
2.5°	826.7	824.4	818.3	824.4	823.6
5°	822.9	822.1	816.0	822.1	822.1
7.5°	817.6	816.8	811.5	817.6	816.8
10°	809.9	809.9	804.6	809.2	809.2
12.5°	800.1	800.1	794.0	799.3	797.8
15°	786.3	788.6	781.8	786.3	785.6
17.5°	772.6	772.6	767.3	771.1	771.1
20°	753.6	756.7	751.3	755.1	752.9
22.5°	736.9	738.4	733.1	736.9	733.1
25°	715.6	718.6	712.5	716.3	715.6
27.5°	693.5	695.8	691.2	695.8	693.5
30°	669.9	672.2	669.1	672.2	671.4
32.5°	644.8	649.3	647.0	649.3	648.6
35°	619.6	624.2	622.7	625.7	626.5
37.5°	593.8	598.3	598.3	602.1	602.9
40°	566.4	572.4	574.0	579.3	578.5
42.5°	539.7	545.8	548.1	554.9	554.9
45°	510.0	518.4	523.0	531.3	532.1
47.5°	481.9	491.0	497.8	505.5	507.0
50°	453.7	462.1	473.5	481.1	482.6
52.5°	423.2	433.9	445.3	456.0	459.0
55°	393.6	405.7	419.4	429.3	433.1
57.5°	363.1	376.0	391.3	403.5	406.5
60°	331.1	346.4	363.9	376.0	379.1
62.5°	301.4	318.2	336.5	349.4	354.0
65°	272.5	288.5	308.3	322.0	325.8
67.5°	241.3	258.8	279.4	294.6	298.4
70°	210.1	229.1	251.2	265.7	269.5
72.5°	178.1	199.4	223.0	239.0	243.6
75°	148.4	170.5	194.9	211.6	217.7
77.5°	120.3	143.1	167.5	185.0	190.3
80°	92.1	115.7	142.3	160.6	165.9
82.5°	67.0	92.1	119.5	137.8	143.1
85°	45.7	71.6	99.7	117.2	123.3
87.5°	28.2	53.3	82.2	99.7	105.8
90°	12.9	38.1	66.2	84.5	90.6
92.5°	11.4	35.0	62.4	80.7	86.0
95°	10.7	32.0	58.6	76.1	81.5
97.5°	9.9	28.9	54.8	72.3	77.6
100°	9.1	25.9	51.8	68.5	73.8
102.5°	8.4	23.6	48.0	64.7	69.3
105°	7.6	20.6	44.9	60.9	66.2
107.5°	6.9	17.5	41.9	57.1	62.4
110°	6.1	15.2	38.1	53.3	58.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.3	12.9	35.0	49.5	54.8
115°	5.3	10.7	31.2	45.7	51.0
117.5°	4.6	8.4	27.4	41.9	47.2
120°	3.8	6.1	24.4	38.1	43.4
122.5°	3.8	4.6	21.3	34.3	39.6
125°	3.0	3.0	18.3	29.7	35.0
127.5°	3.0	2.3	15.2	26.6	30.4
130°	2.3	1.5	12.9	23.6	27.4
132.5°	2.3	1.5	9.9	20.6	24.4
135°	1.5	1.5	6.9	17.5	20.6
137.5°	1.5	0.8	4.6	13.7	17.5
140°	0.8	0.8	1.5	10.7	13.7
142.5°	0.8	0.8	0.8	7.6	10.7
145°	0.8	0.0	0.0	4.6	6.9
147.5°	0.8	0.0	0.0	1.5	3.8
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)