

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: P243721

Luminaire Tested: **S125DR-H850D935-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243721
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-H850D935-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2700.7 lumens
Efficiency: N/A
Efficacy: 114.4 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

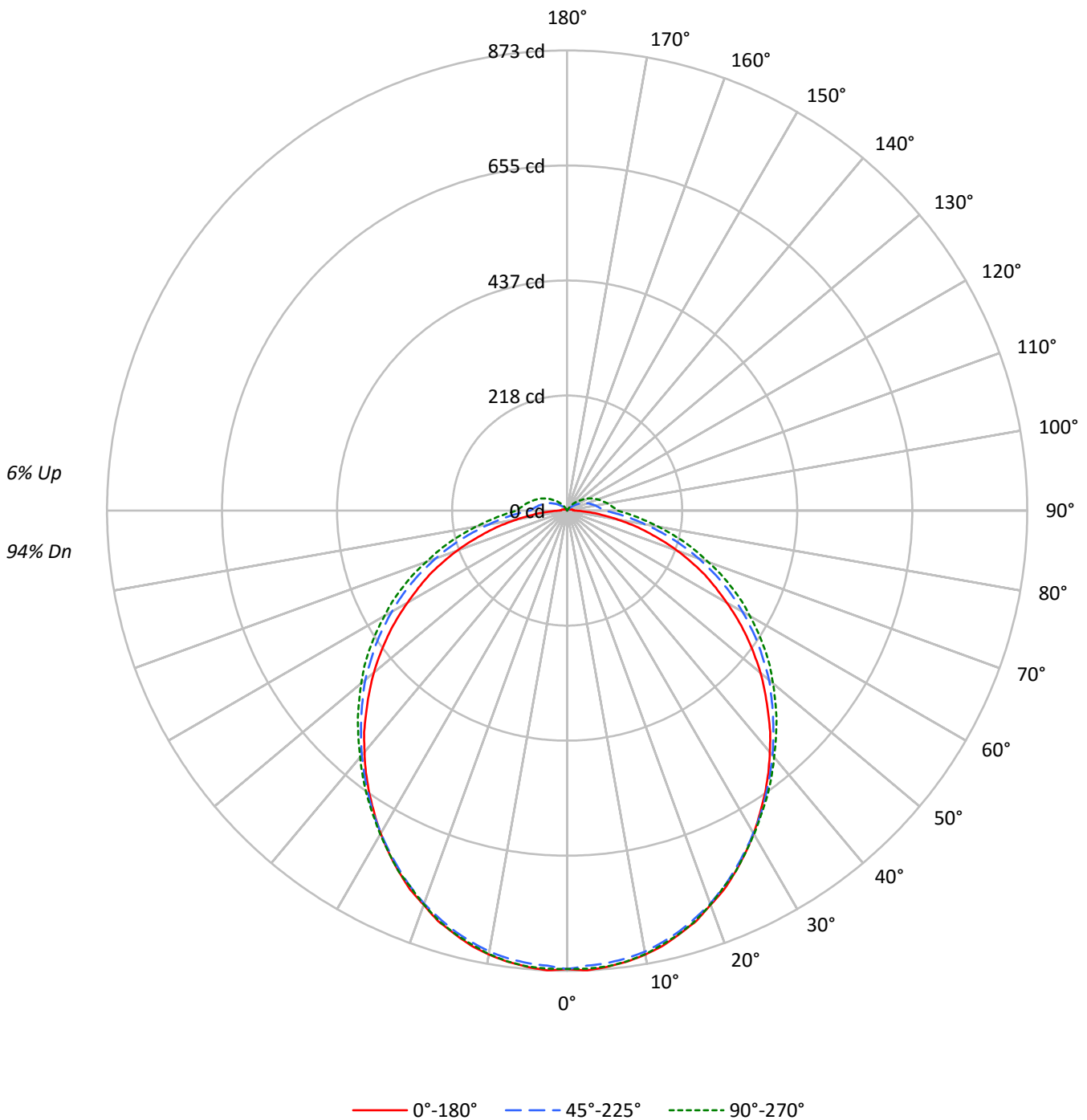
Input Watts (W): 23.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6182	6182	6182
5°	6188	6061	6081
10°	6149	5958	5943
15°	6075	5816	5774
20°	5973	5659	5581
25°	5867	5477	5390
30°	5734	5292	5181
35°	5594	5112	4995
40°	5451	4936	4809
45°	5300	4761	4655
50°	5165	4616	4494
55°	4996	4437	4345
60°	4792	4243	4156
65°	4627	4038	3971
70°	4354	3786	3729
75°	3986	3490	3516
80°	3550	3169	3246
85°	3155	2964	3089



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.3	3.0
10°-20°	233.8	8.7
20°-30°	348.1	12.9
30°-40°	412.4	15.3
40°-50°	426.7	15.8
50°-60°	393.5	14.6
60°-70°	318.0	11.8
70°-80°	212.5	7.9
80°-90°	109.6	4.1
90°-100°	61.5	2.3
100°-110°	45.6	1.7
110°-120°	30.4	1.1
120°-130°	17.0	0.6
130°-140°	7.6	0.3
140°-150°	1.6	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	664.2	24.6
0°-40°	1076.6	39.9
0°-60°	1896.9	70.2
0°-90°	2537.0	93.9
90°-120°	137.5	5.1
90°-150°	163.7	6.1
90°-180°	164.0	6.1
0°-180°	2700.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	870	870	870	870	870	
5°	869	868	862	868	868	83
15°	830	833	826	830	830	234
25°	756	759	752	756	756	348
35°	654	659	658	661	662	409
45°	539	548	552	561	562	416
55°	416	428	443	453	457	371
65°	288	305	326	340	344	284
75°	157	180	206	224	230	167
85°	48	76	105	124	130	50
90°	14	40	70	89	96	9
95°	11	34	62	80	86	9
105°	8	22	47	64	70	8
115°	6	11	33	48	54	5
125°	3	3	19	31	37	3
135°	2	2	7	18	22	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°	869.8	869.8	869.8	869.8	869.8
2.5°	873.0	870.6	864.2	870.6	869.8
5°	869.0	868.2	861.8	868.2	868.2
7.5°	863.4	862.6	857.0	863.4	862.6
10°	855.3	855.3	849.7	854.5	854.5
12.5°	844.9	844.9	838.5	844.1	842.5
15°	830.4	832.8	825.6	830.4	829.6
17.5°	816.0	816.0	810.3	814.3	814.3
20°	795.9	799.1	793.4	797.5	795.1
22.5°	778.2	779.8	774.2	778.2	774.2
25°	755.7	758.9	752.4	756.5	755.7
27.5°	732.4	734.8	729.9	734.8	732.4
30°	707.4	709.8	706.6	709.8	709.0
32.5°	680.9	685.7	683.3	685.7	684.9
35°	654.4	659.2	657.6	660.8	661.6
37.5°	627.0	631.9	631.9	635.9	636.7
40°	598.1	604.5	606.1	611.8	611.0
42.5°	570.0	576.4	578.8	586.0	586.0
45°	538.6	547.5	552.3	561.1	561.9
47.5°	508.9	518.5	525.7	533.8	535.4
50°	479.1	488.0	500.0	508.1	509.7
52.5°	447.0	458.2	470.3	481.5	484.8
55°	415.6	428.5	442.9	453.4	457.4
57.5°	383.5	397.1	413.2	426.1	429.3
60°	349.7	365.8	384.3	397.1	400.3
62.5°	318.3	336.0	355.3	369.0	373.8
65°	287.8	304.7	325.6	340.0	344.1
67.5°	254.8	273.3	295.0	311.1	315.1
70°	221.9	242.0	265.3	280.6	284.6
72.5°	188.1	210.6	235.5	252.4	257.2
75°	156.8	180.1	205.8	223.5	229.9
77.5°	127.0	151.1	176.9	195.3	201.0
80°	97.3	122.2	150.3	169.6	175.2
82.5°	70.7	97.3	126.2	145.5	151.1
85°	48.2	75.6	105.3	123.8	130.2
87.5°	29.7	56.3	86.8	105.3	111.7
90°	13.7	40.2	69.9	89.2	95.7
92.5°	12.1	37.0	65.9	85.2	90.8
95°	11.3	33.8	61.9	80.4	86.0
97.5°	10.5	30.5	57.9	76.4	82.0
100°	9.6	27.3	54.7	72.4	78.0
102.5°	8.8	24.9	50.6	68.3	73.2
105°	8.0	21.7	47.4	64.3	69.9
107.5°	7.2	18.5	44.2	60.3	65.9
110°	6.4	16.1	40.2	56.3	61.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.6	13.7	37.0	52.3	57.9
115°	5.6	11.3	33.0	48.2	53.9
117.5°	4.8	8.8	28.9	44.2	49.8
120°	4.0	6.4	25.7	40.2	45.8
122.5°	4.0	4.8	22.5	36.2	41.8
125°	3.2	3.2	19.3	31.4	37.0
127.5°	3.2	2.4	16.1	28.1	32.2
130°	2.4	1.6	13.7	24.9	28.9
132.5°	2.4	1.6	10.5	21.7	25.7
135°	1.6	1.6	7.2	18.5	21.7
137.5°	1.6	0.8	4.8	14.5	18.5
140°	0.8	0.8	1.6	11.3	14.5
142.5°	0.8	0.8	0.8	8.0	11.3
145°	0.8	0.0	0.0	4.8	7.2
147.5°	0.8	0.0	0.0	1.6	4.0
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)