

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: P243717

Luminaire Tested: **S125DR-H1090D930-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243717
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-H1090D930-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: 3298.1 lumens
Efficiency: N/A
Efficacy: 104.7 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

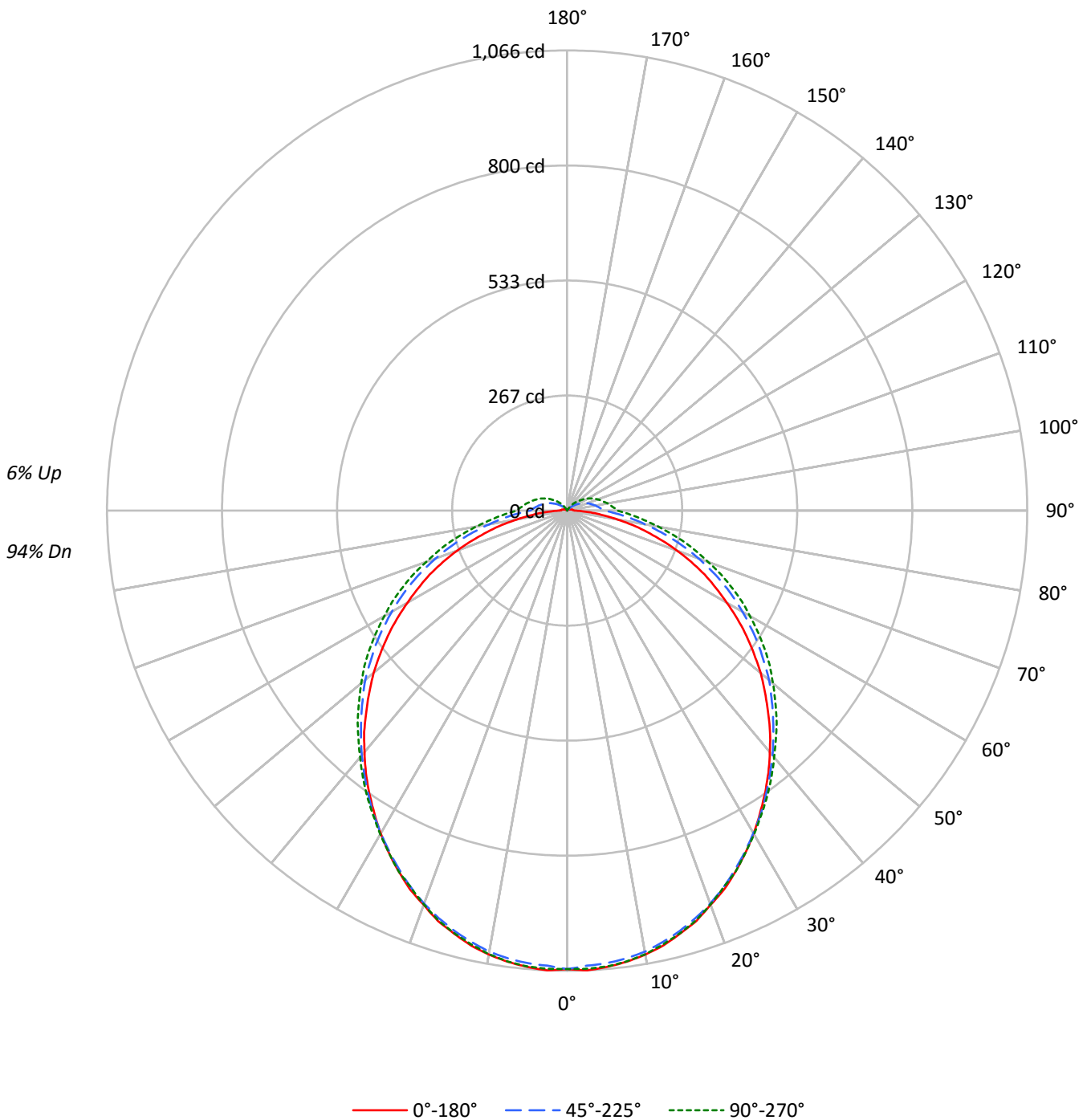
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P243717

CATALOG NUMBER: S125DR-H1090D930-X4F0-XX-UDD-D-W

Luminous Intensity Polar Plot





TEST NUMBER: P243717

CATALOG NUMBER: S125DR-H1090D930-X4F0-XX-UDD-D-W

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°	7549	7549	7549
5°	7557	7401	7425
10°	7510	7276	7258
15°	7419	7103	7052
20°	7294	6911	6815
25°	7165	6688	6582
30°	7003	6462	6327
35°	6831	6242	6099
40°	6657	6028	5872
45°	6472	5814	5685
50°	6308	5637	5488
55°	6101	5418	5306
60°	5852	5181	5075
65°	5649	4931	4849
70°	5315	4624	4554
75°	4865	4261	4294
80°	4334	3871	3965
85°	3855	3620	3772



TEST NUMBER: P243717

CATALOG NUMBER: S125DR-H1090D930-X4F0-XX-UDD-D-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.5	3.0
10°-20°	285.6	8.7
20°-30°	425.1	12.9
30°-40°	503.6	15.3
40°-50°	521.1	15.8
50°-60°	480.6	14.6
60°-70°	388.4	11.8
70°-80°	259.5	7.9
80°-90°	133.9	4.1
90°-100°	75.1	2.3
100°-110°	55.7	1.7
110°-120°	37.1	1.1
120°-130°	20.7	0.6
130°-140°	9.3	0.3
140°-150°	2.0	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	811.2	24.6
0°-40°	1314.8	39.9
0°-60°	2316.4	70.2
0°-90°	3098.2	93.9
90°-120°	167.9	5.1
90°-150°	199.9	6.1
90°-180°	200.0	6.1
0°-180°	3298.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1062	1062	1062	1062	1062	
5°	1061	1060	1052	1060	1060	101
15°	1014	1017	1008	1014	1013	286
25°	923	927	919	924	923	425
35°	799	805	803	807	808	500
45°	658	668	674	685	686	508
55°	508	523	541	554	559	453
65°	351	372	398	415	420	347
75°	191	220	251	273	281	203
85°	59	92	129	151	159	61
90°	17	49	85	109	117	12
95°	14	41	76	98	105	11
105°	10	26	58	78	85	10
115°	7	14	40	59	66	6
125°	4	4	24	38	45	4
135°	2	2	9	23	26	2
145°	1	0	0	6	9	1
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



TEST NUMBER: P243717

CATALOG NUMBER: S125DR-H1090D930-X4F0-XX-UDD-D-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1062.2	1062.2	1062.2	1062.2	1062.2
2.5°	1066.1	1063.2	1055.3	1063.2	1062.2
5°	1061.2	1060.2	1052.4	1060.2	1060.2
7.5°	1054.3	1053.4	1046.5	1054.3	1053.4
10°	1044.5	1044.5	1037.7	1043.5	1043.5
12.5°	1031.8	1031.8	1023.9	1030.8	1028.8
15°	1014.1	1017.0	1008.2	1014.1	1013.1
17.5°	996.4	996.4	989.6	994.5	994.5
20°	971.9	975.8	968.9	973.8	970.9
22.5°	950.3	952.3	945.4	950.3	945.4
25°	922.8	926.7	918.9	923.8	922.8
27.5°	894.3	897.3	891.4	897.3	894.3
30°	863.9	866.8	862.9	866.8	865.9
32.5°	831.5	837.4	834.4	837.4	836.4
35°	799.1	805.0	803.0	807.0	807.9
37.5°	765.7	771.6	771.6	776.5	777.5
40°	730.4	738.2	740.2	747.1	746.1
42.5°	696.0	703.9	706.8	715.7	715.7
45°	657.7	668.5	674.4	685.2	686.2
47.5°	621.4	633.2	642.0	651.9	653.8
50°	585.1	595.9	610.6	620.4	622.4
52.5°	545.8	559.6	574.3	588.0	592.0
55°	507.5	523.2	540.9	553.7	558.6
57.5°	468.3	485.0	504.6	520.3	524.2
60°	427.0	446.7	469.3	485.0	488.9
62.5°	388.8	410.4	433.9	450.6	456.5
65°	351.4	372.1	397.6	415.3	420.2
67.5°	311.2	333.8	360.3	379.9	384.8
70°	270.9	295.5	324.0	342.6	347.5
72.5°	229.7	257.2	287.6	308.3	314.1
75°	191.4	219.9	251.3	272.9	280.8
77.5°	155.1	184.6	216.0	238.6	245.4
80°	118.8	149.2	183.6	207.1	214.0
82.5°	86.4	118.8	154.1	177.7	184.6
85°	58.9	92.3	128.6	151.2	159.0
87.5°	36.3	68.7	106.0	128.6	136.5
90°	16.7	49.1	85.4	109.0	116.8
92.5°	14.7	45.2	80.5	104.1	110.9
95°	13.7	41.2	75.6	98.2	105.0
97.5°	12.8	37.3	70.7	93.3	100.1
100°	11.8	33.4	66.8	88.4	95.2
102.5°	10.8	30.4	61.8	83.4	89.3
105°	9.8	26.5	57.9	78.5	85.4
107.5°	8.8	22.6	54.0	73.6	80.5
110°	7.9	19.6	49.1	68.7	75.6



TEST NUMBER: P243717

CATALOG NUMBER: S125DR-H1090D930-X4F0-XX-UDD-D-W

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	6.9	16.7	45.2	63.8	70.7
115°	6.9	13.7	40.2	58.9	65.8
117.5°	5.9	10.8	35.3	54.0	60.9
120°	4.9	7.9	31.4	49.1	56.0
122.5°	4.9	5.9	27.5	44.2	51.0
125°	3.9	3.9	23.6	38.3	45.2
127.5°	3.9	2.9	19.6	34.4	39.3
130°	2.9	2.0	16.7	30.4	35.3
132.5°	2.9	2.0	12.8	26.5	31.4
135°	2.0	2.0	8.8	22.6	26.5
137.5°	2.0	1.0	5.9	17.7	22.6
140°	1.0	1.0	2.0	13.7	17.7
142.5°	1.0	1.0	1.0	9.8	13.7
145°	1.0	0.0	0.0	5.9	8.8
147.5°	1.0	0.0	0.0	2.0	4.9
150°	0.0	0.0	0.0	0.0	1.0
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)