

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: P242854

Luminaire Tested: **S125DR-S375D930-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242854
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-S375D930-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: 1124.9 lumens
Efficiency: N/A
Efficacy: 97.0 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

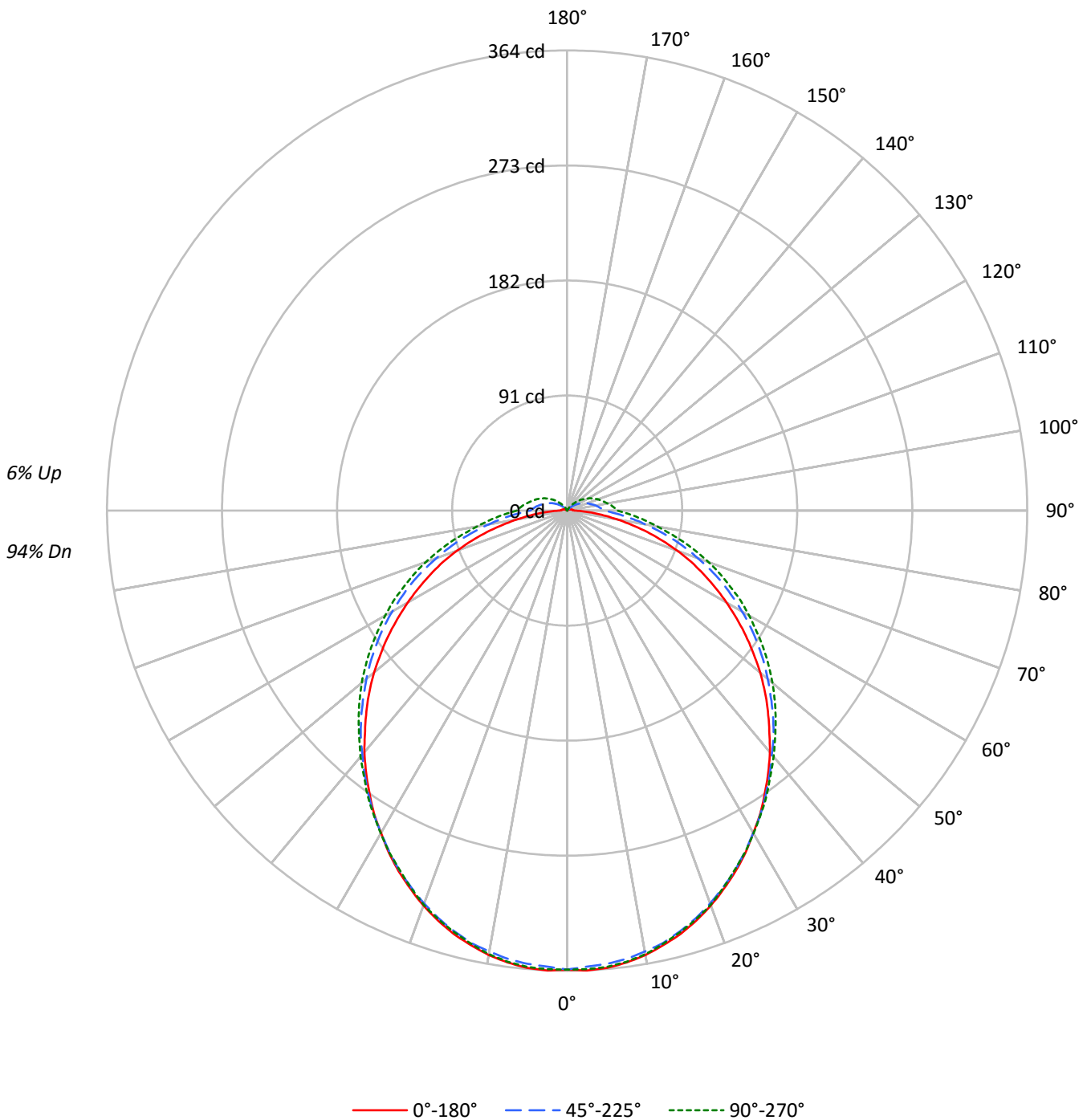
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P242854

CATALOG NUMBER: S125DR-S375D930-X4F0-XX-UDD-D-W

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	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°	2581	2581	2581
5°	2586	2531	2538
10°	2567	2484	2478
15°	2536	2428	2403
20°	2495	2359	2329
25°	2446	2286	2237
30°	2386	2205	2154
35°	2331	2131	2078
40°	2274	2052	2001
45°	2210	1985	1932
50°	2149	1913	1871
55°	2075	1843	1799
60°	1995	1764	1725
65°	1911	1682	1643
70°	1817	1570	1558
75°	1665	1460	1453
80°	1467	1328	1340
85°	1283	1233	1293



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.4	3.1
10°-20°	97.5	8.7
20°-30°	145.0	12.9
30°-40°	171.8	15.3
40°-50°	177.6	15.8
50°-60°	163.6	14.5
60°-70°	132.2	11.8
70°-80°	88.5	7.9
80°-90°	45.7	4.1
90°-100°	25.8	2.3
100°-110°	19.0	1.7
110°-120°	12.7	1.1
120°-130°	7.2	0.6
130°-140°	3.2	0.3
140°-150°	0.6	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	276.9	24.6
0°-40°	448.7	39.9
0°-60°	789.9	70.2
0°-90°	1056.4	93.9
90°-120°	57.5	5.1
90°-150°	68.5	6.1
90°-180°	68.0	6.0
0°-180°	1124.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	363	363	363	363	363	
5°	363	362	360	363	362	34
15°	347	347	345	347	345	98
25°	315	316	314	315	314	145
35°	273	275	274	275	275	171
45°	225	228	230	233	233	173
55°	173	178	184	188	189	154
65°	119	127	136	141	142	118
75°	66	75	86	93	95	69
85°	20	31	44	52	54	20
90°	6	17	29	37	40	4
95°	5	14	26	34	36	4
105°	3	9	20	27	29	3
115°	2	5	14	20	22	2
125°	1	1	8	14	16	1
135°	1	0	3	8	9	1
145°	0	0	0	2	3	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



TEST NUMBER: P242854

CATALOG NUMBER: S125DR-S375D930-X4F0-XX-UDD-D-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	363.1	363.1	363.1	363.1	363.1
2.5°	364.2	363.5	361.0	363.5	363.1
5°	363.1	362.4	359.9	362.7	362.4
7.5°	360.6	360.3	357.8	360.3	359.9
10°	357.0	357.0	354.2	356.7	356.3
12.5°	352.1	352.4	350.3	352.1	351.0
15°	346.7	347.1	344.6	346.7	345.3
17.5°	340.0	340.7	338.2	340.0	338.9
20°	332.5	333.2	330.7	331.8	331.8
22.5°	323.9	325.4	322.5	323.9	322.9
25°	315.0	316.1	314.0	315.4	313.6
27.5°	305.4	306.9	304.4	305.4	304.7
30°	294.4	296.5	294.4	295.1	294.8
32.5°	284.4	286.2	284.8	285.5	285.1
35°	272.7	275.2	274.1	275.2	275.2
37.5°	261.3	263.4	263.1	264.5	264.1
40°	249.5	252.4	252.0	253.5	254.2
42.5°	236.7	240.6	241.7	243.5	243.5
45°	224.6	228.5	230.3	232.8	233.2
47.5°	212.2	215.7	218.6	222.1	222.8
50°	199.3	203.3	207.2	211.1	212.2
52.5°	185.8	190.8	195.8	200.1	200.8
55°	172.6	178.3	184.0	188.0	189.4
57.5°	159.1	165.9	172.3	176.6	177.6
60°	145.6	152.7	159.8	165.2	166.2
62.5°	132.4	139.5	147.4	153.4	154.9
65°	118.9	127.1	135.6	141.0	142.4
67.5°	106.4	114.3	122.8	129.2	131.0
70°	92.6	100.7	110.0	116.8	118.9
72.5°	79.0	87.6	97.9	105.4	106.8
75°	65.5	74.8	86.1	93.3	95.0
77.5°	52.3	63.0	73.7	81.5	82.9
80°	40.2	50.9	63.0	70.8	72.3
82.5°	29.2	40.6	53.0	60.5	63.4
85°	19.6	31.3	43.8	51.6	54.5
87.5°	12.5	23.9	36.0	44.1	46.6
90°	5.7	17.1	29.2	37.4	39.9
92.5°	5.0	15.3	27.8	35.6	38.1
95°	4.6	13.9	26.0	33.8	36.3
97.5°	4.3	12.8	24.6	32.0	34.5
100°	3.9	11.4	22.8	30.3	32.4
102.5°	3.6	10.3	21.4	28.5	30.6
105°	3.2	8.9	19.6	26.7	29.2
107.5°	2.8	7.8	18.2	25.3	27.4
110°	2.5	6.8	16.7	23.5	26.0



TEST NUMBER: P242854

CATALOG NUMBER: S125DR-S375D930-X4F0-XX-UDD-D-W

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.5	5.7	15.3	21.7	24.2
115°	2.1	4.6	13.9	20.3	22.4
117.5°	1.8	3.6	12.5	18.5	21.0
120°	1.8	2.8	11.0	17.1	19.2
122.5°	1.4	1.8	9.6	15.3	17.4
125°	1.4	1.1	8.2	13.9	15.7
127.5°	1.1	0.7	6.8	12.1	14.2
130°	1.1	0.7	5.7	10.7	12.5
132.5°	0.7	0.7	4.3	9.3	10.7
135°	0.7	0.4	2.8	7.5	9.3
137.5°	0.7	0.4	1.8	6.1	7.5
140°	0.4	0.4	0.7	4.6	6.1
142.5°	0.4	0.0	0.0	3.2	4.6
145°	0.4	0.0	0.0	1.8	3.2
147.5°	0.0	0.0	0.0	0.7	1.4
150°	0.0	0.0	0.0	0.0	0.4
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)