

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: P242859

Luminaire Tested: **S125DR-S375D935-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242859
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-S375D935-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1187.9 lumens
Efficiency: N/A
Efficacy: 102.4 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

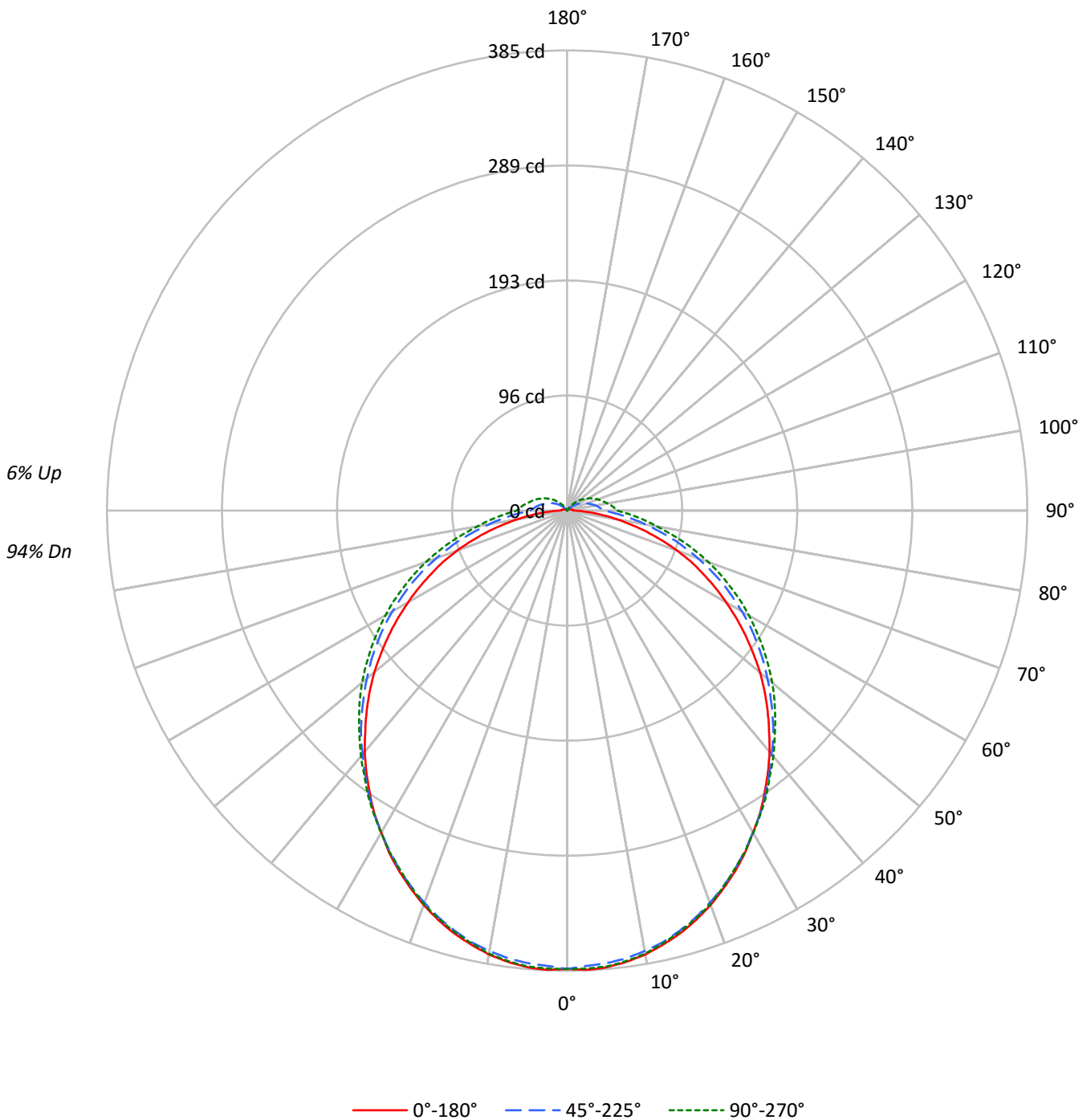
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P242859

CATALOG NUMBER: S125DR-S375D935-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	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°	2726	2726	2726
5°	2731	2673	2680
10°	2711	2623	2617
15°	2679	2564	2538
20°	2635	2491	2459
25°	2583	2414	2362
30°	2520	2328	2275
35°	2462	2250	2194
40°	2401	2168	2112
45°	2334	2097	2040
50°	2269	2020	1976
55°	2192	1947	1900
60°	2108	1864	1823
65°	2019	1776	1736
70°	1917	1658	1646
75°	1759	1543	1535
80°	1550	1402	1414
85°	1355	1300	1364



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.3	3.1
10°-20°	103.0	8.7
20°-30°	153.2	12.9
30°-40°	181.4	15.3
40°-50°	187.5	15.8
50°-60°	172.8	14.5
60°-70°	139.7	11.8
70°-80°	93.5	7.9
80°-90°	48.3	4.1
90°-100°	27.2	2.3
100°-110°	20.1	1.7
110°-120°	13.4	1.1
120°-130°	7.6	0.6
130°-140°	3.3	0.3
140°-150°	0.7	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	292.5	24.6
0°-40°	473.9	39.9
0°-60°	834.2	70.2
0°-90°	1115.6	93.9
90°-120°	60.7	5.1
90°-150°	72.3	6.1
90°-180°	72.0	6.1
0°-180°	1187.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	384	383	380	383	383	36
15°	366	366	364	366	365	103
25°	333	334	332	333	331	153
35°	288	291	290	291	291	180
45°	237	241	243	246	246	183
55°	182	188	194	198	200	163
65°	126	134	143	149	150	125
75°	69	79	91	98	100	73
85°	21	33	46	54	58	22
90°	6	18	31	40	42	4
95°	5	15	27	36	38	4
105°	3	9	21	28	31	4
115°	2	5	15	21	24	2
125°	2	1	9	15	16	1
135°	1	0	3	8	10	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: P242859

CATALOG NUMBER: S125DR-S375D935-X4F0-XX-UDD-D-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	383.5	383.5	383.5	383.5	383.5
2.5°	384.6	383.8	381.2	383.8	383.5
5°	383.5	382.7	380.1	383.1	382.7
7.5°	380.8	380.4	377.8	380.4	380.1
10°	377.1	377.1	374.1	376.7	376.3
12.5°	371.8	372.2	369.9	371.8	370.7
15°	366.2	366.5	363.9	366.2	364.7
17.5°	359.0	359.8	357.1	359.0	357.9
20°	351.1	351.9	349.2	350.4	350.4
22.5°	342.1	343.6	340.6	342.1	341.0
25°	332.7	333.8	331.6	333.1	331.2
27.5°	322.6	324.1	321.4	322.6	321.8
30°	310.9	313.2	310.9	311.6	311.3
32.5°	300.4	302.2	300.7	301.5	301.1
35°	288.0	290.6	289.5	290.6	290.6
37.5°	275.9	278.2	277.8	279.3	278.9
40°	263.5	266.5	266.2	267.7	268.4
42.5°	250.0	254.1	255.3	257.1	257.1
45°	237.2	241.3	243.2	245.9	246.2
47.5°	224.1	227.8	230.8	234.6	235.3
50°	210.5	214.7	218.8	222.9	224.1
52.5°	196.2	201.5	206.8	211.3	212.0
55°	182.3	188.3	194.4	198.5	200.0
57.5°	168.0	175.2	182.0	186.5	187.6
60°	153.8	161.3	168.8	174.4	175.6
62.5°	139.8	147.4	155.6	162.0	163.5
65°	125.6	134.2	143.2	148.9	150.4
67.5°	112.4	120.7	129.7	136.5	138.3
70°	97.7	106.4	116.2	123.3	125.6
72.5°	83.5	92.5	103.4	111.3	112.8
75°	69.2	78.9	91.0	98.5	100.4
77.5°	55.3	66.5	77.8	86.1	87.6
80°	42.5	53.8	66.5	74.8	76.3
82.5°	30.8	42.9	56.0	63.9	66.9
85°	20.7	33.1	46.2	54.5	57.5
87.5°	13.2	25.2	38.0	46.6	49.2
90°	6.0	18.0	30.8	39.5	42.1
92.5°	5.3	16.2	29.3	37.6	40.2
95°	4.9	14.7	27.4	35.7	38.3
97.5°	4.5	13.5	25.9	33.8	36.5
100°	4.1	12.0	24.1	32.0	34.2
102.5°	3.8	10.9	22.6	30.1	32.3
105°	3.4	9.4	20.7	28.2	30.8
107.5°	3.0	8.3	19.2	26.7	28.9
110°	2.6	7.1	17.7	24.8	27.4



TEST NUMBER: P242859

CATALOG NUMBER: S125DR-S375D935-X4F0-XX-UDD-D-W

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.6	6.0	16.2	22.9	25.6
115°	2.3	4.9	14.7	21.4	23.7
117.5°	1.9	3.8	13.2	19.5	22.2
120°	1.9	3.0	11.7	18.0	20.3
122.5°	1.5	1.9	10.2	16.2	18.4
125°	1.5	1.1	8.6	14.7	16.5
127.5°	1.1	0.8	7.1	12.8	15.0
130°	1.1	0.8	6.0	11.3	13.2
132.5°	0.8	0.8	4.5	9.8	11.3
135°	0.8	0.4	3.0	7.9	9.8
137.5°	0.8	0.4	1.9	6.4	7.9
140°	0.4	0.4	0.8	4.9	6.4
142.5°	0.4	0.0	0.0	3.4	4.9
145°	0.4	0.0	0.0	1.9	3.4
147.5°	0.0	0.0	0.0	0.8	1.5
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)