

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: P242864

Luminaire Tested: **S125DR-S375D940-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242864
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-S375D940-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1230.2 lumens
Efficiency: N/A
Efficacy: 106.1 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

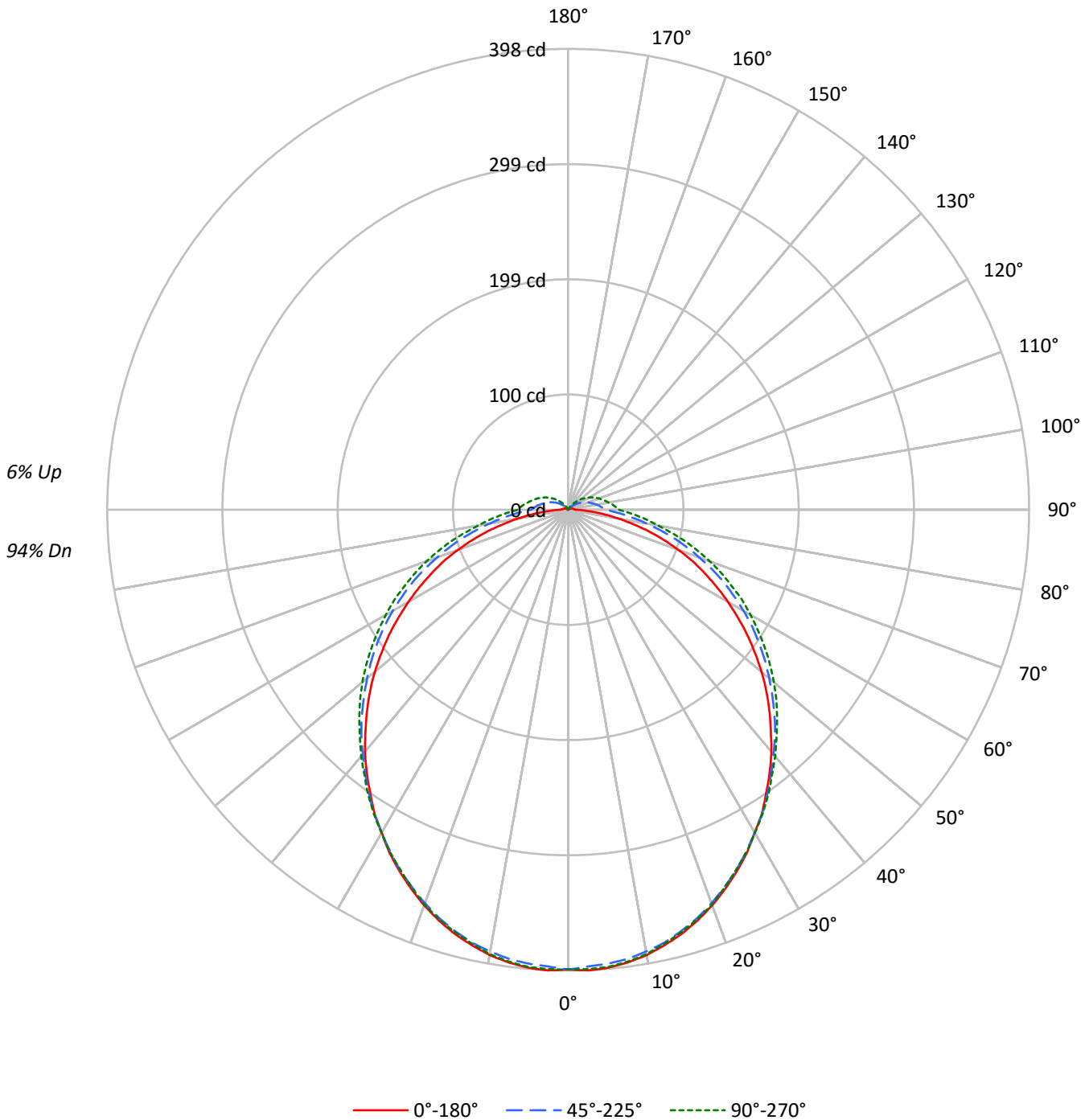
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2822	2822	2822
5°	2828	2768	2776
10°	2808	2716	2711
15°	2774	2655	2629
20°	2729	2580	2547
25°	2676	2500	2447
30°	2610	2412	2356
35°	2549	2330	2272
40°	2487	2245	2188
45°	2418	2172	2113
50°	2350	2092	2045
55°	2270	2016	1967
60°	2182	1930	1887
65°	2090	1839	1797
70°	1986	1717	1704
75°	1820	1597	1590
80°	1605	1453	1464
85°	1401	1348	1414



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.6	3.1
10°-20°	106.7	8.7
20°-30°	158.6	12.9
30°-40°	187.9	15.3
40°-50°	194.2	15.8
50°-60°	178.9	14.5
60°-70°	144.6	11.8
70°-80°	96.8	7.9
80°-90°	50.0	4.1
90°-100°	28.2	2.3
100°-110°	20.8	1.7
110°-120°	13.9	1.1
120°-130°	7.9	0.6
130°-140°	3.4	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°	302.9	24.6
0°-40°	490.8	39.9
0°-60°	863.9	70.2
0°-90°	1155.4	93.9
90°-120°	62.8	5.1
90°-150°	74.9	6.1
90°-180°	75.0	6.1
0°-180°	1230.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	397	397	397	397	397	
5°	397	396	394	397	396	38
15°	379	380	377	379	378	107
25°	345	346	343	345	343	159
35°	298	301	300	301	301	187
45°	246	250	252	255	255	190
55°	189	195	201	206	207	169
65°	130	139	148	154	156	129
75°	72	82	94	102	104	76
85°	21	34	48	56	60	22
90°	6	19	32	41	44	4
95°	5	15	28	37	40	4
105°	4	10	21	29	32	4
115°	2	5	15	22	24	2
125°	2	1	9	15	17	1
135°	1	0	3	8	10	1
145°	0	0	0	2	4	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°	397.1	397.1	397.1	397.1	397.1
2.5°	398.3	397.5	394.8	397.5	397.1
5°	397.1	396.3	393.6	396.7	396.3
7.5°	394.4	394.0	391.3	394.0	393.6
10°	390.5	390.5	387.4	390.1	389.7
12.5°	385.1	385.4	383.1	385.1	383.9
15°	379.2	379.6	376.9	379.2	377.7
17.5°	371.8	372.6	369.9	371.8	370.7
20°	363.6	364.4	361.7	362.9	362.9
22.5°	354.3	355.9	352.7	354.3	353.1
25°	344.6	345.7	343.4	345.0	343.0
27.5°	334.1	335.6	332.9	334.1	333.3
30°	322.0	324.3	322.0	322.8	322.4
32.5°	311.1	313.0	311.5	312.3	311.9
35°	298.2	301.0	299.8	301.0	301.0
37.5°	285.8	288.1	287.7	289.3	288.9
40°	272.9	276.0	275.7	277.2	278.0
42.5°	258.9	263.2	264.4	266.3	266.3
45°	245.7	250.0	251.9	254.6	255.0
47.5°	232.0	235.9	239.1	242.9	243.7
50°	218.0	222.3	226.6	230.9	232.0
52.5°	203.2	208.7	214.1	218.8	219.6
55°	188.8	195.1	201.3	205.6	207.1
57.5°	174.0	181.4	188.4	193.1	194.3
60°	159.2	167.0	174.8	180.7	181.8
62.5°	144.8	152.6	161.2	167.8	169.4
65°	130.0	139.0	148.3	154.2	155.7
67.5°	116.4	125.0	134.3	141.3	143.3
70°	101.2	110.2	120.3	127.7	130.0
72.5°	86.4	95.8	107.1	115.2	116.8
75°	71.6	81.8	94.2	102.0	104.0
77.5°	57.2	68.9	80.6	89.2	90.7
80°	44.0	55.7	68.9	77.5	79.0
82.5°	31.9	44.4	58.0	66.2	69.3
85°	21.4	34.3	47.9	56.5	59.6
87.5°	13.6	26.1	39.3	48.3	51.0
90°	6.2	18.7	31.9	40.9	43.6
92.5°	5.5	16.7	30.4	38.9	41.7
95°	5.1	15.2	28.4	37.0	39.7
97.5°	4.7	14.0	26.9	35.0	37.8
100°	4.3	12.5	24.9	33.1	35.4
102.5°	3.9	11.3	23.4	31.1	33.5
105°	3.5	9.7	21.4	29.2	31.9
107.5°	3.1	8.6	19.9	27.6	30.0
110°	2.7	7.4	18.3	25.7	28.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.7	6.2	16.7	23.7	26.5
115°	2.3	5.1	15.2	22.2	24.5
117.5°	1.9	3.9	13.6	20.2	23.0
120°	1.9	3.1	12.1	18.7	21.0
122.5°	1.6	1.9	10.5	16.7	19.1
125°	1.6	1.2	9.0	15.2	17.1
127.5°	1.2	0.8	7.4	13.2	15.6
130°	1.2	0.8	6.2	11.7	13.6
132.5°	0.8	0.8	4.7	10.1	11.7
135°	0.8	0.4	3.1	8.2	10.1
137.5°	0.8	0.4	1.9	6.6	8.2
140°	0.4	0.4	0.8	5.1	6.6
142.5°	0.4	0.0	0.0	3.5	5.1
145°	0.4	0.0	0.0	1.9	3.5
147.5°	0.0	0.0	0.0	0.8	1.6
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)