

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: P242849

Luminaire Tested: **S125DR-S375D840-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242849
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-S375D840-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1393.2 lumens
Efficiency: N/A
Efficacy: 120.1 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

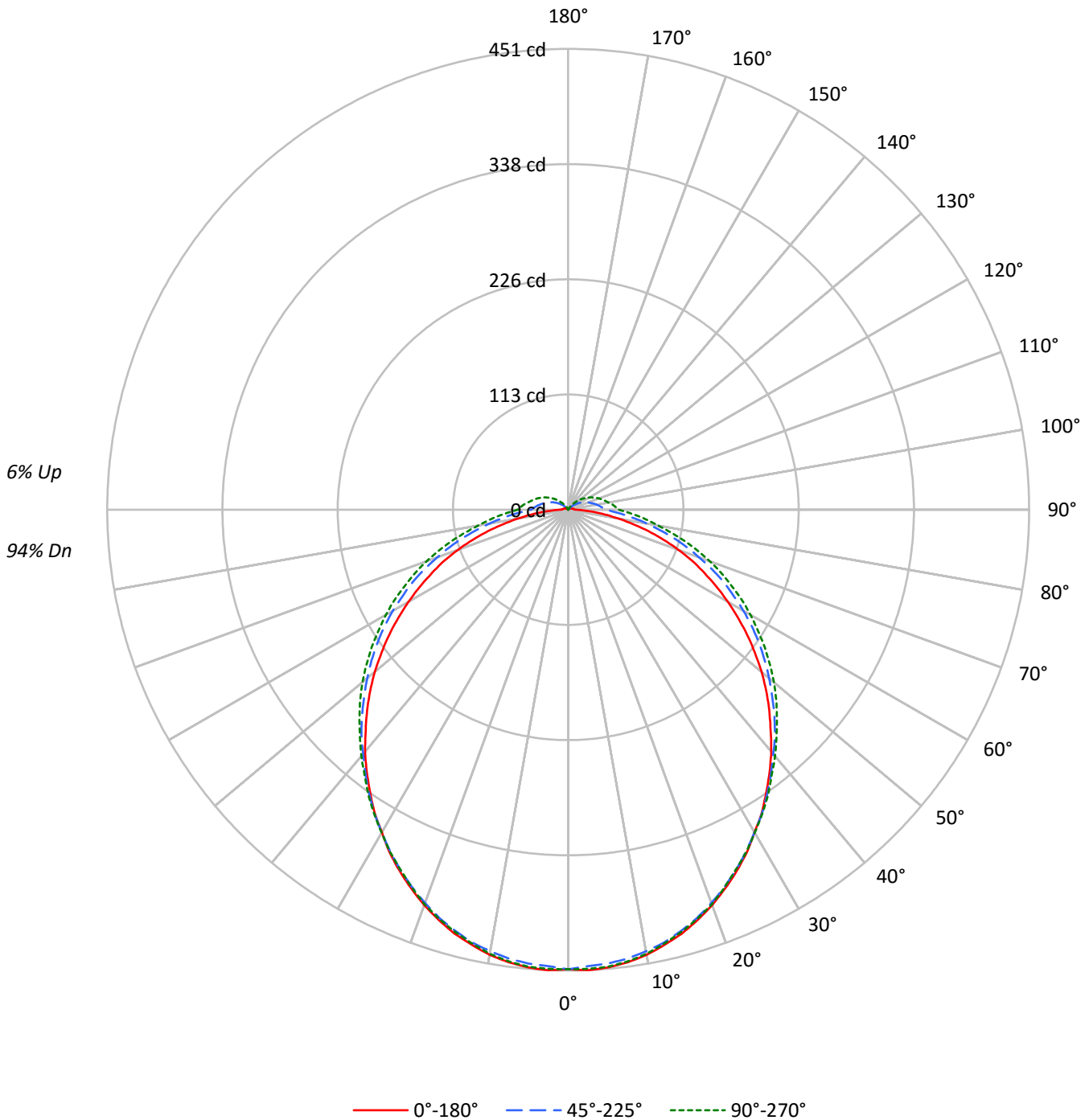
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3196	3196	3196
5°	3202	3135	3144
10°	3180	3076	3070
15°	3142	3007	2977
20°	3090	2922	2884
25°	3030	2831	2771
30°	2956	2731	2668
35°	2887	2639	2573
40°	2817	2543	2477
45°	2737	2459	2393
50°	2662	2369	2317
55°	2572	2284	2228
60°	2471	2186	2137
65°	2368	2084	2036
70°	2249	1944	1930
75°	2062	1809	1800
80°	1817	1645	1658
85°	1591	1526	1602



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.6	3.1
10°-20°	120.8	8.7
20°-30°	179.7	12.9
30°-40°	212.8	15.3
40°-50°	220.0	15.8
50°-60°	202.6	14.5
60°-70°	163.8	11.8
70°-80°	109.6	7.9
80°-90°	56.7	4.1
90°-100°	31.9	2.3
100°-110°	23.5	1.7
110°-120°	15.7	1.1
120°-130°	8.9	0.6
130°-140°	3.9	0.3
140°-150°	0.8	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	343.0	24.6
0°-40°	555.8	39.9
0°-60°	978.4	70.2
0°-90°	1308.4	93.9
90°-120°	71.2	5.1
90°-150°	84.8	6.1
90°-180°	85.0	6.1
0°-180°	1393.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	450	450	450	450	450	
5°	450	449	446	449	449	43
15°	430	430	427	430	428	121
25°	390	392	389	391	388	180
35°	338	341	340	341	341	211
45°	278	283	285	288	289	215
55°	214	221	228	233	235	191
65°	147	157	168	175	176	146
75°	81	93	107	116	118	86
85°	24	39	54	64	68	25
90°	7	21	36	46	49	5
95°	6	17	32	42	45	5
105°	4	11	24	33	36	4
115°	3	6	17	25	28	3
125°	2	1	10	17	19	1
135°	1	0	4	9	12	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°	449.7	449.7	449.7	449.7	449.7
2.5°	451.1	450.2	447.1	450.2	449.7
5°	449.7	448.9	445.8	449.3	448.9
7.5°	446.7	446.2	443.1	446.2	445.8
10°	442.3	442.3	438.7	441.8	441.4
12.5°	436.1	436.5	433.9	436.1	434.8
15°	429.5	429.9	426.8	429.5	427.7
17.5°	421.1	422.0	418.9	421.1	419.8
20°	411.8	412.7	409.6	410.9	410.9
22.5°	401.2	403.0	399.5	401.2	399.9
25°	390.2	391.5	388.9	390.7	388.5
27.5°	378.3	380.1	377.0	378.3	377.4
30°	364.6	367.3	364.6	365.5	365.1
32.5°	352.3	354.5	352.7	353.6	353.2
35°	337.8	340.8	339.5	340.8	340.8
37.5°	323.6	326.3	325.8	327.6	327.2
40°	309.1	312.6	312.2	313.9	314.8
42.5°	293.2	298.1	299.4	301.6	301.6
45°	278.2	283.1	285.3	288.4	288.8
47.5°	262.8	267.2	270.7	275.1	276.0
50°	246.9	251.8	256.6	261.5	262.8
52.5°	230.2	236.3	242.5	247.8	248.7
55°	213.9	220.9	228.0	232.8	234.6
57.5°	197.1	205.5	213.4	218.7	220.0
60°	180.3	189.2	198.0	204.6	205.9
62.5°	164.0	172.8	182.5	190.0	191.8
65°	147.3	157.4	168.0	174.6	176.4
67.5°	131.8	141.5	152.1	160.1	162.3
70°	114.6	124.8	136.2	144.6	147.3
72.5°	97.9	108.5	121.3	130.5	132.3
75°	81.1	92.6	106.7	115.5	117.7
77.5°	64.8	78.0	91.3	101.0	102.7
80°	49.8	63.1	78.0	87.7	89.5
82.5°	36.2	50.3	65.7	75.0	78.5
85°	24.3	38.8	54.2	63.9	67.5
87.5°	15.4	29.5	44.5	54.7	57.8
90°	7.1	21.2	36.2	46.3	49.4
92.5°	6.2	19.0	34.4	44.1	47.2
95°	5.7	17.2	32.2	41.9	45.0
97.5°	5.3	15.9	30.4	39.7	42.8
100°	4.9	14.1	28.2	37.5	40.1
102.5°	4.4	12.8	26.5	35.3	37.9
105°	4.0	11.0	24.3	33.1	36.2
107.5°	3.5	9.7	22.5	31.3	34.0
110°	3.1	8.4	20.7	29.1	32.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.1	7.1	19.0	26.9	30.0
115°	2.6	5.7	17.2	25.1	27.8
117.5°	2.2	4.4	15.4	22.9	26.0
120°	2.2	3.5	13.7	21.2	23.8
122.5°	1.8	2.2	11.9	19.0	21.6
125°	1.8	1.3	10.1	17.2	19.4
127.5°	1.3	0.9	8.4	15.0	17.6
130°	1.3	0.9	7.1	13.2	15.4
132.5°	0.9	0.9	5.3	11.5	13.2
135°	0.9	0.4	3.5	9.3	11.5
137.5°	0.9	0.4	2.2	7.5	9.3
140°	0.4	0.4	0.9	5.7	7.5
142.5°	0.4	0.0	0.0	4.0	5.7
145°	0.4	0.0	0.0	2.2	4.0
147.5°	0.0	0.0	0.0	0.9	1.8
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)