

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: P242840

Luminaire Tested: **S125DR-S375D830-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242840
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-S375D830-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1300.3 lumens
Efficiency: N/A
Efficacy: 112.1 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

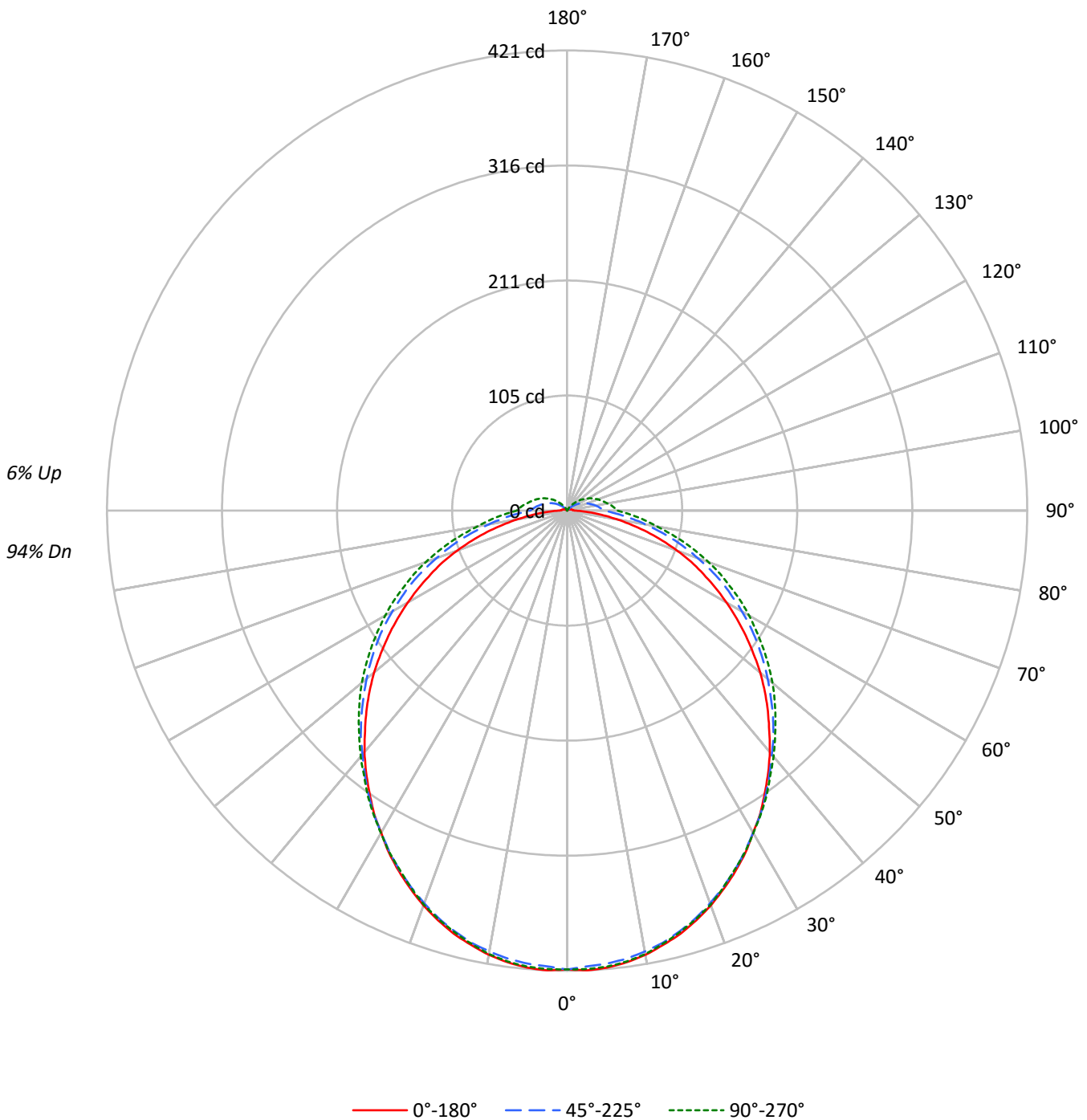
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2984	2984	2984
5°	2989	2926	2934
10°	2968	2871	2865
15°	2932	2807	2779
20°	2885	2727	2692
25°	2828	2642	2586
30°	2759	2549	2490
35°	2694	2463	2401
40°	2629	2373	2312
45°	2555	2296	2234
50°	2485	2211	2163
55°	2400	2132	2079
60°	2306	2040	1995
65°	2210	1945	1900
70°	2099	1815	1802
75°	1924	1689	1681
80°	1696	1535	1547
85°	1479	1424	1495



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	3.1
10°-20°	112.8	8.7
20°-30°	167.7	12.9
30°-40°	198.6	15.3
40°-50°	205.3	15.8
50°-60°	189.1	14.5
60°-70°	152.9	11.8
70°-80°	102.3	7.9
80°-90°	52.9	4.1
90°-100°	29.8	2.3
100°-110°	22.0	1.7
110°-120°	14.7	1.1
120°-130°	8.3	0.6
130°-140°	3.6	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°	320.2	24.6
0°-40°	518.8	39.9
0°-60°	913.2	70.2
0°-90°	1221.2	93.9
90°-120°	66.4	5.1
90°-150°	79.1	6.1
90°-180°	79.0	6.1
0°-180°	1300.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	420	419	416	419	419	40
15°	401	401	398	401	399	113
25°	364	365	363	365	363	168
35°	315	318	317	318	318	197
45°	260	264	266	269	270	200
55°	200	206	213	217	219	178
65°	138	147	157	163	165	136
75°	76	86	100	108	110	80
85°	23	36	51	60	63	24
90°	7	20	34	43	46	5
95°	5	16	30	39	42	4
105°	4	10	23	31	34	4
115°	2	5	16	24	26	2
125°	2	1	10	16	18	1
135°	1	0	3	9	11	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°	419.8	419.8	419.8	419.8	419.8
2.5°	421.0	420.2	417.3	420.2	419.8
5°	419.8	418.9	416.1	419.4	418.9
7.5°	416.9	416.5	413.6	416.5	416.1
10°	412.8	412.8	409.5	412.4	411.9
12.5°	407.0	407.4	405.0	407.0	405.8
15°	400.8	401.2	398.4	400.8	399.2
17.5°	393.0	393.8	391.0	393.0	391.8
20°	384.4	385.2	382.3	383.6	383.6
22.5°	374.5	376.1	372.9	374.5	373.3
25°	364.2	365.4	363.0	364.6	362.6
27.5°	353.1	354.7	351.9	353.1	352.3
30°	340.3	342.8	340.3	341.2	340.8
32.5°	328.8	330.9	329.2	330.1	329.6
35°	315.2	318.1	316.9	318.1	318.1
37.5°	302.1	304.5	304.1	305.8	305.4
40°	288.5	291.8	291.4	293.0	293.8
42.5°	273.7	278.2	279.4	281.5	281.5
45°	259.7	264.2	266.3	269.1	269.6
47.5°	245.3	249.4	252.7	256.8	257.6
50°	230.5	235.0	239.5	244.0	245.3
52.5°	214.8	220.6	226.3	231.3	232.1
55°	199.6	206.2	212.8	217.3	218.9
57.5°	184.0	191.8	199.2	204.1	205.4
60°	168.3	176.5	184.8	191.0	192.2
62.5°	153.1	161.3	170.4	177.4	179.0
65°	137.5	146.9	156.8	163.0	164.6
67.5°	123.0	132.1	142.0	149.4	151.4
70°	107.0	116.5	127.2	135.0	137.5
72.5°	91.4	101.2	113.2	121.8	123.5
75°	75.7	86.4	99.6	107.8	109.9
77.5°	60.5	72.8	85.2	94.2	95.9
80°	46.5	58.8	72.8	81.9	83.5
82.5°	33.7	46.9	61.3	70.0	73.3
85°	22.6	36.2	50.6	59.7	63.0
87.5°	14.4	27.6	41.6	51.0	53.9
90°	6.6	19.8	33.7	43.2	46.1
92.5°	5.8	17.7	32.1	41.2	44.0
95°	5.3	16.0	30.0	39.1	42.0
97.5°	4.9	14.8	28.4	37.0	39.9
100°	4.5	13.2	26.3	35.0	37.4
102.5°	4.1	11.9	24.7	32.9	35.4
105°	3.7	10.3	22.6	30.9	33.7
107.5°	3.3	9.1	21.0	29.2	31.7
110°	2.9	7.8	19.3	27.2	30.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.9	6.6	17.7	25.1	28.0
115°	2.5	5.3	16.0	23.5	25.9
117.5°	2.1	4.1	14.4	21.4	24.3
120°	2.1	3.3	12.8	19.8	22.2
122.5°	1.6	2.1	11.1	17.7	20.2
125°	1.6	1.2	9.5	16.0	18.1
127.5°	1.2	0.8	7.8	14.0	16.5
130°	1.2	0.8	6.6	12.3	14.4
132.5°	0.8	0.8	4.9	10.7	12.3
135°	0.8	0.4	3.3	8.6	10.7
137.5°	0.8	0.4	2.1	7.0	8.6
140°	0.4	0.4	0.8	5.3	7.0
142.5°	0.4	0.0	0.0	3.7	5.3
145°	0.4	0.0	0.0	2.1	3.7
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)