

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: P231643

Luminaire Tested: **S125-DR-1-27-X-0048-1-U-DD-4-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231643
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33919)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125-DR-1-27-X-0048-1-U-DD-4-W
Description: DEFINE 5 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH DROP LENS.
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

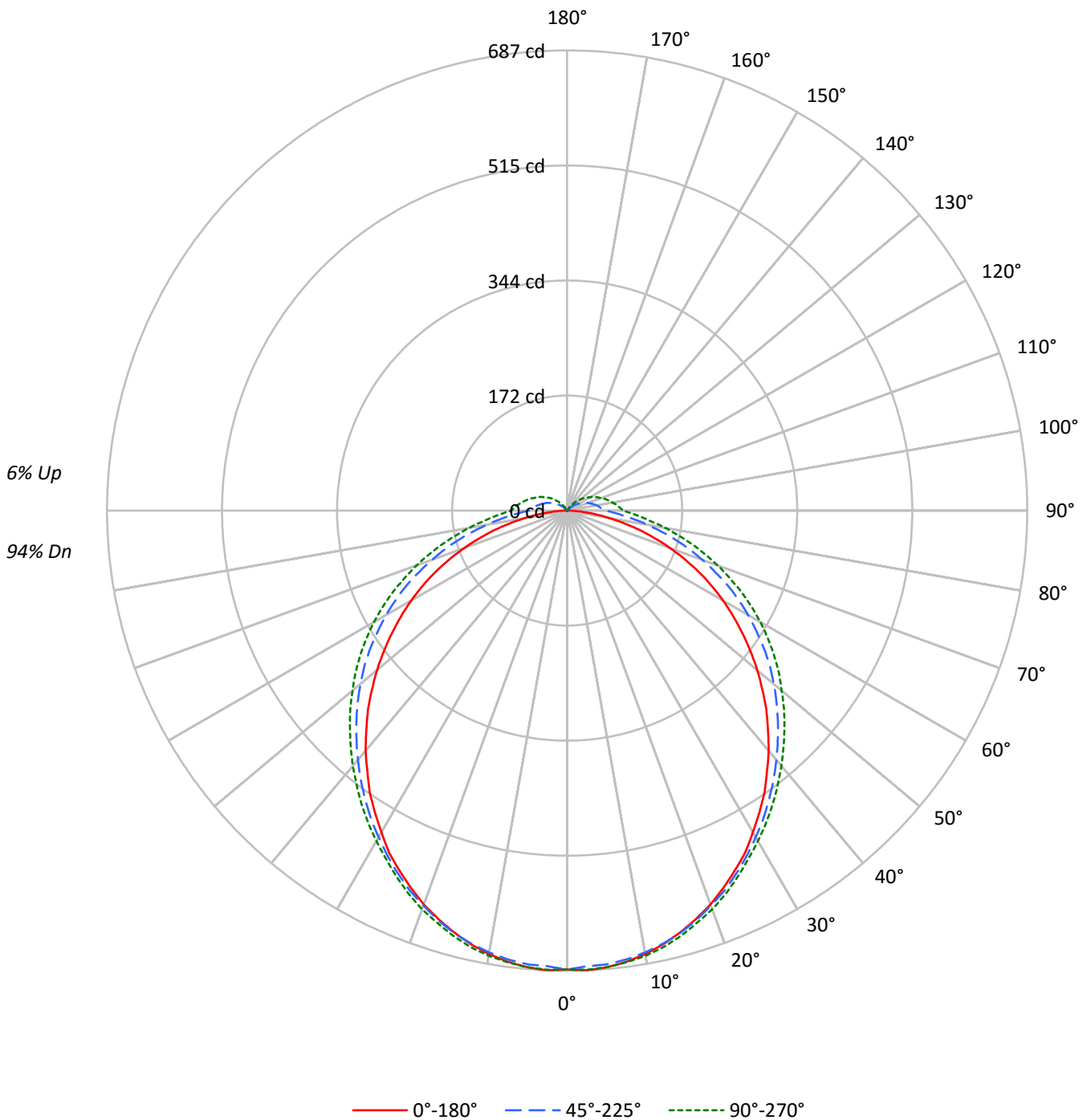
Lumens per Lamp: N/A
Luminaire Lumens: 2159.2 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.92' x H: 0.08')
CIE Type: Direct

Input Watts (W): 27.9
Input Voltage (V): 120
Input Current (Ain): 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	87	80	74	93	85	78	73	80	75	70	76	72	68	72	69	65	63
3	87	77	68	61	84	74	67	60	71	64	58	67	61	57	64	59	55	52
4	80	68	59	52	77	66	57	51	63	55	50	59	53	48	57	51	47	45
5	73	60	51	44	71	59	50	44	56	48	43	53	47	42	51	45	41	38
6	68	54	45	39	65	53	44	38	51	43	37	48	42	37	46	40	36	34
7	63	49	40	34	61	48	40	34	46	38	33	44	37	32	42	36	32	30
8	58	45	36	30	57	44	36	30	42	35	29	40	34	29	39	33	28	26
9	55	41	33	27	53	40	32	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	24	36	29	24	34	28	24	33	27	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4828	4828	4828
5°	4831	4741	4752
10°	4793	4656	4654
15°	4730	4560	4534
20°	4657	4437	4407
25°	4563	4314	4263
30°	4457	4180	4127
35°	4355	4051	4004
40°	4230	3922	3882
45°	4104	3805	3767
50°	3961	3686	3653
55°	3812	3562	3552
60°	3654	3415	3428
65°	3462	3252	3277
70°	3185	3035	3104
75°	2823	2807	2916
80°	2271	2535	2723
85°	1600	2341	2610



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.9	3.0
10°-20°	184.6	8.5
20°-30°	276.1	12.8
30°-40°	329.3	15.2
40°-50°	342.4	15.9
50°-60°	317.0	14.7
60°-70°	256.2	11.9
70°-80°	170.2	7.9
80°-90°	86.6	4.0
90°-100°	49.2	2.3
100°-110°	37.0	1.7
110°-120°	24.7	1.1
120°-130°	14.0	0.6
130°-140°	6.1	0.3
140°-150°	1.1	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	525.6	24.3
0°-40°	854.8	39.6
0°-60°	1514.2	70.1
0°-90°	2027.1	93.9
90°-120°	110.9	5.1
90°-150°	132.1	6.1
90°-180°	132.0	6.1
0°-180°	2159.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	685	685	685	685	685	
5°	684	683	680	684	684	65
15°	652	654	653	658	657	184
25°	593	598	598	604	603	273
35°	514	521	526	533	535	321
45°	421	433	445	456	459	324
55°	320	338	359	372	377	286
65°	217	239	264	282	287	214
75°	112	138	167	186	192	118
85°	25	53	84	104	111	28
90°	0	27	57	77	83	2
95°	0	22	50	70	76	0
105°	0	14	39	56	62	1
115°	0	6	27	42	48	0
125°	1	1	15	29	33	1
135°	1	0	5	15	19	1
145°	1	1	0	3	6	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°	685.1	685.1	685.1	685.1	685.1
2.5°	686.8	686.0	680.9	686.0	686.0
5°	684.3	683.4	680.0	684.3	684.3
7.5°	679.2	679.2	675.8	680.9	680.0
10°	672.4	673.2	669.8	674.9	674.9
12.5°	663.1	663.9	662.2	667.3	667.3
15°	652.0	653.7	652.9	658.0	657.1
17.5°	639.3	642.7	641.0	646.1	645.3
20°	625.8	629.1	627.4	633.4	633.4
22.5°	609.6	613.9	613.9	619.0	619.0
25°	592.7	597.8	597.8	603.7	602.9
27.5°	575.7	580.8	580.8	586.8	585.9
30°	554.5	561.3	563.0	569.8	569.8
32.5°	534.2	541.8	545.2	551.1	552.8
35°	513.8	520.6	525.7	533.3	535.0
37.5°	490.1	500.3	506.2	515.5	516.4
40°	468.0	478.2	485.8	496.0	497.7
42.5°	443.5	456.2	465.5	476.5	478.2
45°	420.6	433.3	445.2	456.2	458.7
47.5°	395.1	410.4	424.0	435.8	439.2
50°	370.5	386.6	402.8	415.5	418.0
52.5°	345.1	362.9	381.6	394.3	398.5
55°	319.7	338.3	358.7	372.2	377.3
57.5°	294.2	314.6	334.9	350.2	355.3
60°	268.8	289.1	312.0	327.3	333.2
62.5°	243.3	263.7	288.3	304.4	310.3
65°	217.1	239.1	264.5	281.5	286.6
67.5°	189.9	213.7	239.1	256.9	262.0
70°	163.6	188.2	214.5	233.2	239.1
72.5°	137.4	162.8	190.8	209.4	215.4
75°	111.9	138.2	167.0	185.7	192.5
77.5°	86.5	114.5	143.3	162.8	169.6
80°	62.7	91.6	121.3	140.8	148.4
82.5°	42.4	71.2	101.7	122.1	128.0
85°	24.6	53.4	83.9	104.3	111.1
87.5°	11.0	39.0	69.5	89.0	95.8
90°	0.0	27.1	56.8	77.2	83.1
92.5°	0.0	24.6	53.4	72.9	79.7
95°	0.0	22.0	50.0	69.5	76.3
97.5°	0.0	20.3	47.5	66.1	72.9
100°	0.0	17.8	44.9	62.7	68.7
102.5°	0.0	16.1	41.5	59.4	65.3
105°	0.0	13.6	39.0	56.0	61.9
107.5°	0.8	11.9	35.6	52.6	58.5
110°	0.8	10.2	33.1	49.2	54.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	7.6	29.7	45.8	50.9
115°	0.0	5.9	27.1	42.4	47.5
117.5°	0.0	4.2	23.7	39.0	44.1
120°	0.8	2.5	21.2	35.6	39.9
122.5°	0.8	0.8	18.7	31.4	36.5
125°	0.8	0.8	15.3	28.8	33.1
127.5°	0.0	0.8	12.7	25.4	29.7
130°	0.8	0.0	10.2	22.0	26.3
132.5°	0.8	0.8	7.6	18.7	22.9
135°	0.8	0.0	5.1	15.3	18.7
137.5°	0.8	0.0	3.4	11.9	15.3
140°	0.8	0.8	0.8	9.3	11.9
142.5°	0.8	0.8	0.0	5.9	8.5
145°	0.8	0.8	0.0	3.4	5.9
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
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)