

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: P231639

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231639
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-LO-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: 1063.4 lumens
Efficiency: N/A
Efficacy: 78.2 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

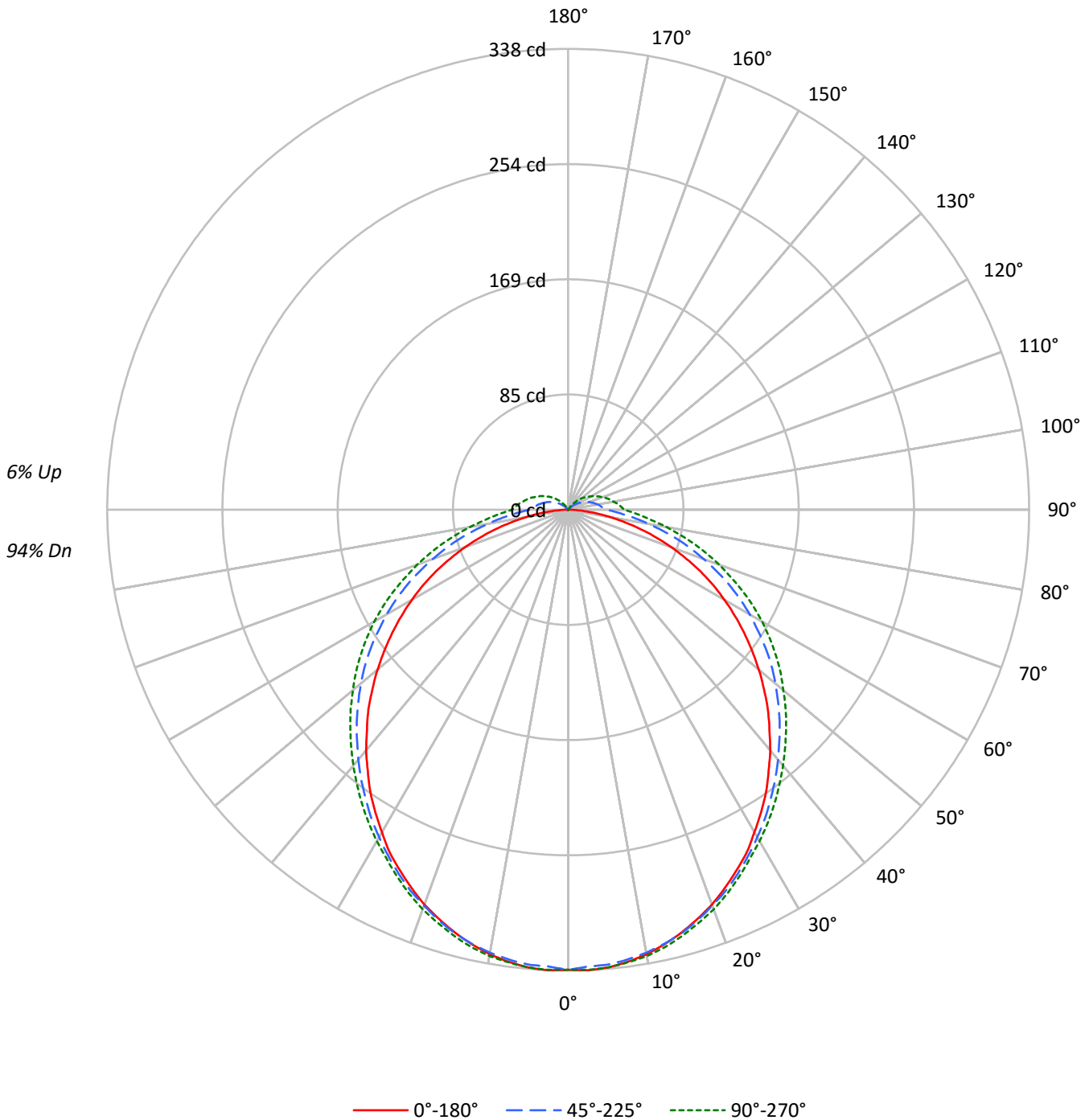
Input Watts (W): 13.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2378	2378	2378
5°	2379	2335	2340
10°	2360	2293	2292
15°	2329	2246	2233
20°	2293	2185	2170
25°	2247	2124	2099
30°	2195	2059	2033
35°	2144	1995	1972
40°	2083	1932	1912
45°	2021	1873	1855
50°	1951	1815	1799
55°	1877	1754	1749
60°	1800	1682	1688
65°	1705	1602	1614
70°	1569	1494	1529
75°	1390	1383	1436
80°	1119	1248	1341
85°	787	1152	1285



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.9	3.0
10°-20°	90.9	8.5
20°-30°	136.0	12.8
30°-40°	162.2	15.2
40°-50°	168.6	15.9
50°-60°	156.1	14.7
60°-70°	126.2	11.9
70°-80°	83.8	7.9
80°-90°	42.7	4.0
90°-100°	24.3	2.3
100°-110°	18.2	1.7
110°-120°	12.1	1.1
120°-130°	6.9	0.6
130°-140°	3.0	0.3
140°-150°	0.6	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	258.8	24.3
0°-40°	421.0	39.6
0°-60°	745.7	70.1
0°-90°	998.3	93.9
90°-120°	54.6	5.1
90°-150°	65.1	6.1
90°-180°	65.0	6.1
0°-180°	1063.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	337	337	337	337	337	
5°	337	337	335	337	337	32
15°	321	322	322	324	324	91
25°	292	294	294	297	297	134
35°	253	256	259	263	264	158
45°	207	213	219	225	226	160
55°	157	167	177	183	186	141
65°	107	118	130	139	141	106
75°	55	68	82	91	95	58
85°	12	26	41	51	55	14
90°	0	13	28	38	41	1
95°	0	11	25	34	38	0
105°	0	7	19	28	30	0
115°	0	3	13	21	23	0
125°	0	0	8	14	16	0
135°	0	0	2	8	9	0
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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	337.4	337.4	337.4	337.4	337.4
2.5°	338.2	337.8	335.3	337.8	337.8
5°	337.0	336.6	334.9	337.0	337.0
7.5°	334.5	334.5	332.8	335.3	334.9
10°	331.1	331.5	329.9	332.4	332.4
12.5°	326.5	327.0	326.1	328.6	328.6
15°	321.1	321.9	321.5	324.0	323.6
17.5°	314.8	316.5	315.7	318.2	317.8
20°	308.2	309.8	309.0	311.9	311.9
22.5°	300.2	302.3	302.3	304.8	304.8
25°	291.9	294.4	294.4	297.3	296.9
27.5°	283.5	286.0	286.0	289.0	288.5
30°	273.1	276.4	277.3	280.6	280.6
32.5°	263.1	266.8	268.5	271.4	272.3
35°	253.0	256.4	258.9	262.6	263.5
37.5°	241.4	246.4	249.3	253.9	254.3
40°	230.5	235.5	239.3	244.3	245.1
42.5°	218.4	224.7	229.2	234.7	235.5
45°	207.1	213.4	219.2	224.7	225.9
47.5°	194.6	202.1	208.8	214.6	216.3
50°	182.5	190.4	198.3	204.6	205.9
52.5°	169.9	178.7	187.9	194.2	196.3
55°	157.4	166.6	176.6	183.3	185.8
57.5°	144.9	154.9	164.9	172.5	175.0
60°	132.4	142.4	153.7	161.2	164.1
62.5°	119.8	129.9	142.0	149.9	152.8
65°	106.9	117.8	130.3	138.6	141.1
67.5°	93.5	105.2	117.8	126.5	129.0
70°	80.6	92.7	105.6	114.8	117.8
72.5°	67.6	80.2	94.0	103.1	106.1
75°	55.1	68.1	82.3	91.4	94.8
77.5°	42.6	56.4	70.6	80.2	83.5
80°	30.9	45.1	59.7	69.3	73.1
82.5°	20.9	35.1	50.1	60.1	63.1
85°	12.1	26.3	41.3	51.4	54.7
87.5°	5.4	19.2	34.2	43.8	47.2
90°	0.0	13.4	28.0	38.0	40.9
92.5°	0.0	12.1	26.3	35.9	39.3
95°	0.0	10.9	24.6	34.2	37.6
97.5°	0.0	10.0	23.4	32.6	35.9
100°	0.0	8.8	22.1	30.9	33.8
102.5°	0.0	7.9	20.5	29.2	32.2
105°	0.0	6.7	19.2	27.6	30.5
107.5°	0.4	5.8	17.5	25.9	28.8
110°	0.4	5.0	16.3	24.2	26.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	3.8	14.6	22.5	25.1
115°	0.0	2.9	13.4	20.9	23.4
117.5°	0.0	2.1	11.7	19.2	21.7
120°	0.4	1.3	10.4	17.5	19.6
122.5°	0.4	0.4	9.2	15.4	18.0
125°	0.4	0.4	7.5	14.2	16.3
127.5°	0.0	0.4	6.3	12.5	14.6
130°	0.4	0.0	5.0	10.9	12.9
132.5°	0.4	0.4	3.8	9.2	11.3
135°	0.4	0.0	2.5	7.5	9.2
137.5°	0.4	0.0	1.7	5.8	7.5
140°	0.4	0.4	0.4	4.6	5.8
142.5°	0.4	0.4	0.0	2.9	4.2
145°	0.4	0.4	0.0	1.7	2.9
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)