

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: P231647

Luminaire Tested: **S125-DR-2-27-X-0048-1-U-DD-4-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231647
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-2-27-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: 3059.7 lumens
Efficiency: N/A
Efficacy: 71.8 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

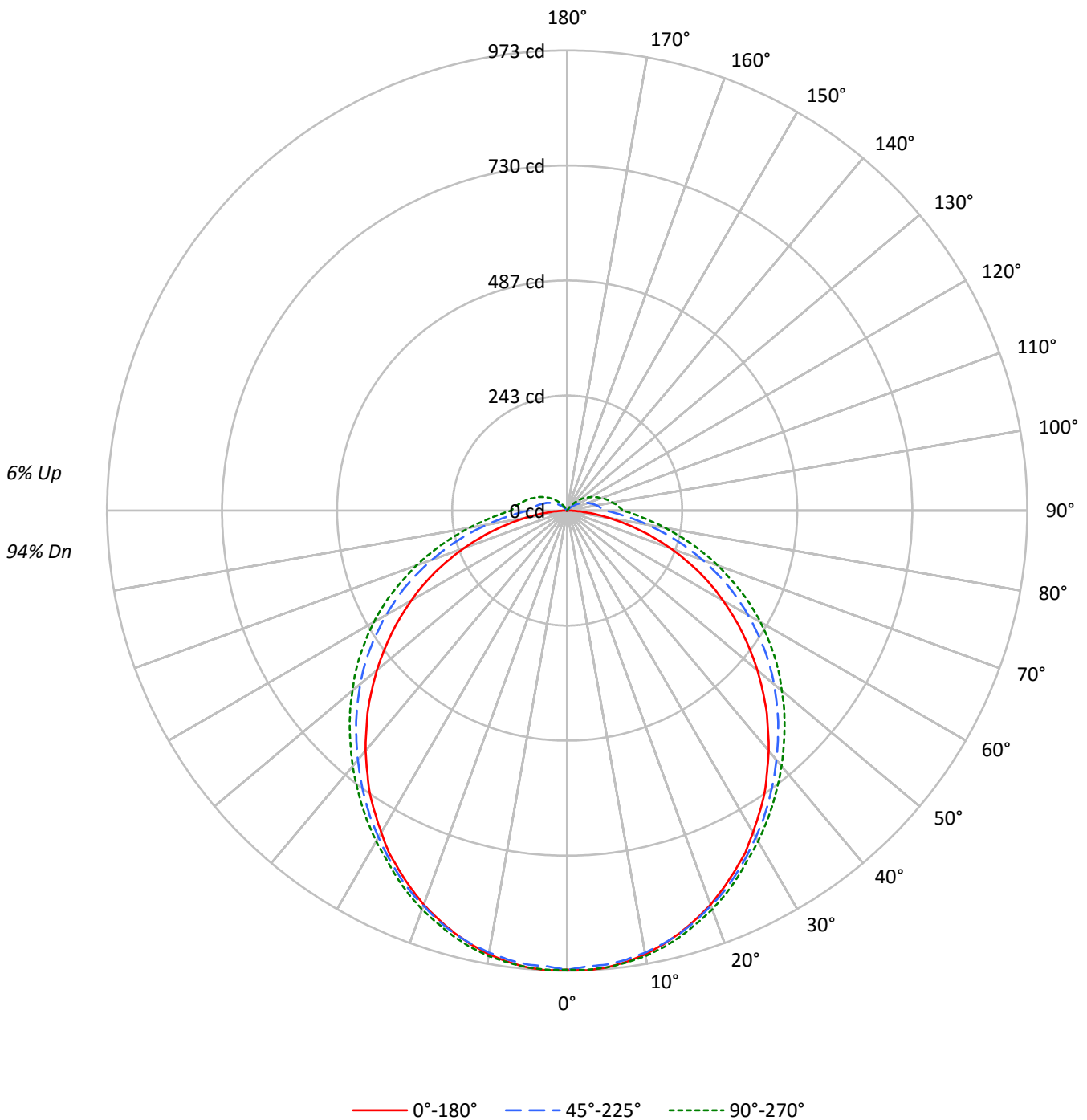
Input Watts (W): 42.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	6841	6841	6841
5°	6846	6719	6733
10°	6792	6599	6595
15°	6702	6461	6426
20°	6598	6287	6245
25°	6465	6112	6041
30°	6316	5924	5848
35°	6172	5740	5673
40°	5994	5559	5502
45°	5815	5391	5338
50°	5613	5223	5176
55°	5401	5047	5034
60°	5177	4839	4858
65°	4905	4609	4644
70°	4514	4301	4399
75°	4001	3979	4131
80°	3219	3590	3859
85°	2263	3317	3698



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.9	3.0
10°-20°	261.6	8.5
20°-30°	391.2	12.8
30°-40°	466.6	15.2
40°-50°	485.1	15.9
50°-60°	449.1	14.7
60°-70°	363.0	11.9
70°-80°	241.1	7.9
80°-90°	122.8	4.0
90°-100°	69.8	2.3
100°-110°	52.4	1.7
110°-120°	35.0	1.1
120°-130°	19.8	0.6
130°-140°	8.6	0.3
140°-150°	1.6	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	744.8	24.3
0°-40°	1211.3	39.6
0°-60°	2145.6	70.1
0°-90°	2872.5	93.9
90°-120°	157.2	5.1
90°-150°	187.2	6.1
90°-180°	187.0	6.1
0°-180°	3059.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	971	971	971	971	971	
5°	970	968	964	970	970	92
15°	924	926	925	932	931	260
25°	840	847	847	856	854	387
35°	728	738	745	756	758	455
45°	596	614	631	646	650	459
55°	453	479	508	528	535	405
65°	308	339	375	399	406	304
75°	159	196	237	263	273	168
85°	35	76	119	148	157	40
90°	0	38	80	109	118	2
95°	0	31	71	98	108	0
105°	0	19	55	79	88	1
115°	0	8	38	60	67	0
125°	1	1	22	41	47	1
135°	1	0	7	22	26	1
145°	1	1	0	5	8	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°	970.8	970.8	970.8	970.8	970.8
2.5°	973.2	972.0	964.8	972.0	972.0
5°	969.6	968.4	963.6	969.6	969.6
7.5°	962.4	962.4	957.6	964.8	963.6
10°	952.8	954.0	949.2	956.4	956.4
12.5°	939.6	940.8	938.4	945.6	945.6
15°	923.9	926.3	925.1	932.4	931.2
17.5°	905.9	910.7	908.3	915.5	914.3
20°	886.7	891.5	889.1	897.5	897.5
22.5°	863.9	869.9	869.9	877.1	877.1
25°	839.8	847.0	847.0	855.5	854.3
27.5°	815.8	823.0	823.0	831.4	830.2
30°	785.8	795.4	797.8	807.4	807.4
32.5°	756.9	767.7	772.6	781.0	783.4
35°	728.1	737.7	744.9	755.7	758.1
37.5°	694.5	708.9	717.3	730.5	731.7
40°	663.2	677.6	688.5	702.9	705.3
42.5°	628.4	646.4	659.6	675.2	677.6
45°	595.9	614.0	630.8	646.4	650.0
47.5°	559.9	581.5	600.7	617.6	622.4
50°	525.0	547.9	570.7	588.7	592.3
52.5°	489.0	514.2	540.7	558.7	564.7
55°	453.0	479.4	508.2	527.5	534.7
57.5°	416.9	445.8	474.6	496.2	503.4
60°	380.9	409.7	442.1	463.8	472.2
62.5°	344.8	373.7	408.5	431.3	439.7
65°	307.6	338.8	374.9	398.9	406.1
67.5°	269.1	302.8	338.8	364.0	371.3
70°	231.9	266.7	304.0	330.4	338.8
72.5°	194.6	230.7	270.3	296.8	305.2
75°	158.6	195.8	236.7	263.1	272.7
77.5°	122.6	162.2	203.1	230.7	240.3
80°	88.9	129.8	171.8	199.4	210.3
82.5°	60.1	100.9	144.2	173.0	181.4
85°	34.8	75.7	118.9	147.8	157.4
87.5°	15.6	55.3	98.5	126.2	135.8
90°	0.0	38.4	80.5	109.3	117.7
92.5°	0.0	34.8	75.7	103.3	112.9
95°	0.0	31.2	70.9	98.5	108.1
97.5°	0.0	28.8	67.3	93.7	103.3
100°	0.0	25.2	63.7	88.9	97.3
102.5°	0.0	22.8	58.9	84.1	92.5
105°	0.0	19.2	55.3	79.3	87.7
107.5°	1.2	16.8	50.5	74.5	82.9
110°	1.2	14.4	46.9	69.7	76.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	10.8	42.1	64.9	72.1
115°	0.0	8.4	38.4	60.1	67.3
117.5°	0.0	6.0	33.6	55.3	62.5
120°	1.2	3.6	30.0	50.5	56.5
122.5°	1.2	1.2	26.4	44.5	51.7
125°	1.2	1.2	21.6	40.9	46.9
127.5°	0.0	1.2	18.0	36.0	42.1
130°	1.2	0.0	14.4	31.2	37.2
132.5°	1.2	1.2	10.8	26.4	32.4
135°	1.2	0.0	7.2	21.6	26.4
137.5°	1.2	0.0	4.8	16.8	21.6
140°	1.2	1.2	1.2	13.2	16.8
142.5°	1.2	1.2	0.0	8.4	12.0
145°	1.2	1.2	0.0	4.8	8.4
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)