

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: P231646

Luminaire Tested: **S125-DR-1-40-X-0048-1-U-DD-4-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231646
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-1-40-X-0048-1-U-DD-4-W
Description: DEFINE 5 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH DROP LENS.
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

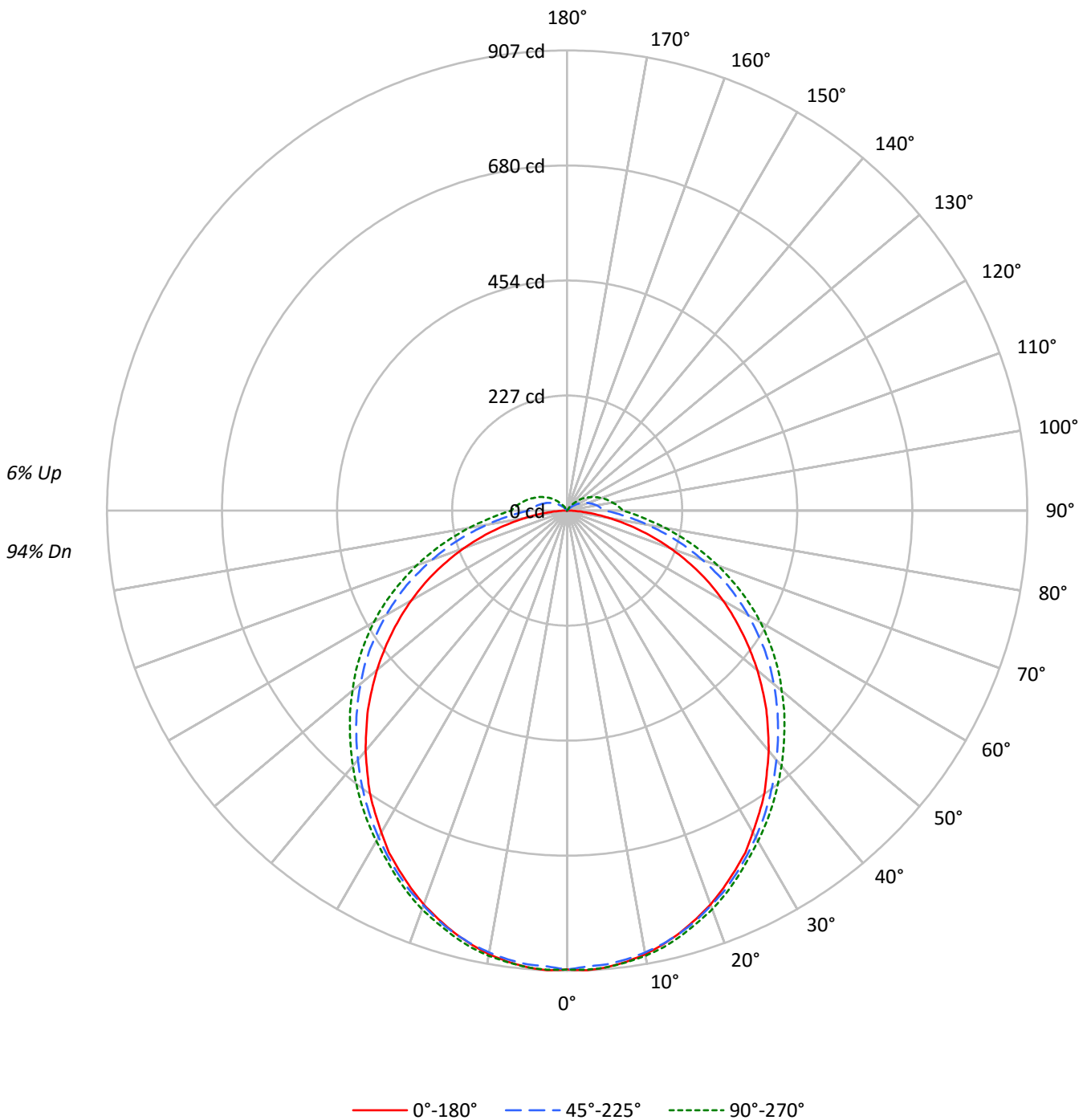
Lumens per Lamp: N/A
Luminaire Lumens: 2851.3 lumens
Efficiency: N/A
Efficacy: 102.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.92' x H: 0.08')
CIE Type: Direct

Input Watts (W): 27.9
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	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°	6375	6375	6375
5°	6380	6261	6274
10°	6330	6149	6145
15°	6246	6021	5987
20°	6149	5859	5820
25°	6025	5697	5629
30°	5886	5520	5450
35°	5751	5350	5287
40°	5585	5180	5127
45°	5419	5023	4974
50°	5231	4867	4824
55°	5033	4703	4690
60°	4824	4509	4527
65°	4570	4295	4327
70°	4207	4008	4099
75°	3728	3708	3851
80°	3002	3346	3595
85°	2114	3091	3447



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.7	3.0
10°-20°	243.8	8.5
20°-30°	364.6	12.8
30°-40°	434.8	15.2
40°-50°	452.1	15.9
50°-60°	418.5	14.7
60°-70°	338.3	11.9
70°-80°	224.7	7.9
80°-90°	114.4	4.0
90°-100°	65.0	2.3
100°-110°	48.8	1.7
110°-120°	32.6	1.1
120°-130°	18.5	0.6
130°-140°	8.0	0.3
140°-150°	1.5	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	694.0	24.3
0°-40°	1128.8	39.6
0°-60°	1999.4	70.1
0°-90°	2676.8	93.9
90°-120°	146.5	5.1
90°-150°	174.5	6.1
90°-180°	174.0	6.1
0°-180°	2851.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	905	905	905	905	905	
5°	904	902	898	904	904	86
15°	861	863	862	869	868	243
25°	783	789	789	797	796	361
35°	678	688	694	704	706	424
45°	555	572	588	602	606	428
55°	422	447	474	492	498	378
65°	287	316	349	372	378	283
75°	148	182	221	245	254	156
85°	32	70	111	138	147	37
90°	0	36	75	102	110	2
95°	0	29	66	92	101	0
105°	0	18	52	74	82	1
115°	0	8	36	56	63	0
125°	1	1	20	38	44	1
135°	1	0	7	20	25	1
145°	1	1	0	4	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°	904.7	904.7	904.7	904.7	904.7
2.5°	906.9	905.8	899.1	905.8	905.8
5°	903.6	902.4	898.0	903.6	903.6
7.5°	896.8	896.8	892.4	899.1	898.0
10°	887.9	889.0	884.5	891.2	891.2
12.5°	875.6	876.7	874.4	881.2	881.2
15°	861.0	863.3	862.1	868.9	867.7
17.5°	844.2	848.7	846.5	853.2	852.1
20°	826.3	830.8	828.5	836.4	836.4
22.5°	805.0	810.6	810.6	817.3	817.3
25°	782.6	789.4	789.4	797.2	796.1
27.5°	760.2	767.0	767.0	774.8	773.7
30°	732.3	741.2	743.5	752.4	752.4
32.5°	705.4	715.5	719.9	727.8	730.0
35°	678.5	687.5	694.2	704.3	706.5
37.5°	647.2	660.6	668.4	680.7	681.9
40°	618.0	631.5	641.6	655.0	657.2
42.5°	585.6	602.4	614.7	629.2	631.5
45°	555.3	572.1	587.8	602.4	605.7
47.5°	521.8	541.9	559.8	575.5	580.0
50°	489.3	510.6	531.8	548.6	552.0
52.5°	455.7	479.2	503.8	520.6	526.2
55°	422.1	446.7	473.6	491.5	498.2
57.5°	388.5	415.4	442.3	462.4	469.1
60°	354.9	381.8	412.0	432.2	440.0
62.5°	321.3	348.2	380.7	402.0	409.8
65°	286.6	315.7	349.3	371.7	378.4
67.5°	250.8	282.2	315.7	339.3	346.0
70°	216.1	248.6	283.3	307.9	315.7
72.5°	181.4	215.0	251.9	276.6	284.4
75°	147.8	182.5	220.6	245.2	254.2
77.5°	114.2	151.2	189.2	215.0	223.9
80°	82.9	120.9	160.1	185.9	195.9
82.5°	56.0	94.1	134.4	161.2	169.1
85°	32.5	70.5	110.8	137.7	146.7
87.5°	14.6	51.5	91.8	117.6	126.5
90°	0.0	35.8	75.0	101.9	109.7
92.5°	0.0	32.5	70.5	96.3	105.2
95°	0.0	29.1	66.1	91.8	100.8
97.5°	0.0	26.9	62.7	87.3	96.3
100°	0.0	23.5	59.3	82.9	90.7
102.5°	0.0	21.3	54.9	78.4	86.2
105°	0.0	17.9	51.5	73.9	81.7
107.5°	1.1	15.7	47.0	69.4	77.3
110°	1.1	13.4	43.7	64.9	71.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	10.1	39.2	60.5	67.2
115°	0.0	7.8	35.8	56.0	62.7
117.5°	0.0	5.6	31.4	51.5	58.2
120°	1.1	3.4	28.0	47.0	52.6
122.5°	1.1	1.1	24.6	41.4	48.1
125°	1.1	1.1	20.2	38.1	43.7
127.5°	0.0	1.1	16.8	33.6	39.2
130°	1.1	0.0	13.4	29.1	34.7
132.5°	1.1	1.1	10.1	24.6	30.2
135°	1.1	0.0	6.7	20.2	24.6
137.5°	1.1	0.0	4.5	15.7	20.2
140°	1.1	1.1	1.1	12.3	15.7
142.5°	1.1	1.1	0.0	7.8	11.2
145°	1.1	1.1	0.0	4.5	7.8
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)