

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: P231645

Luminaire Tested: **S125-DR-1-35-X-0048-1-U-DD-4-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231645  
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-1-35-X-0048-1-U-DD-4-W  
Description: DEFINE 5 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH DROP LENS.  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

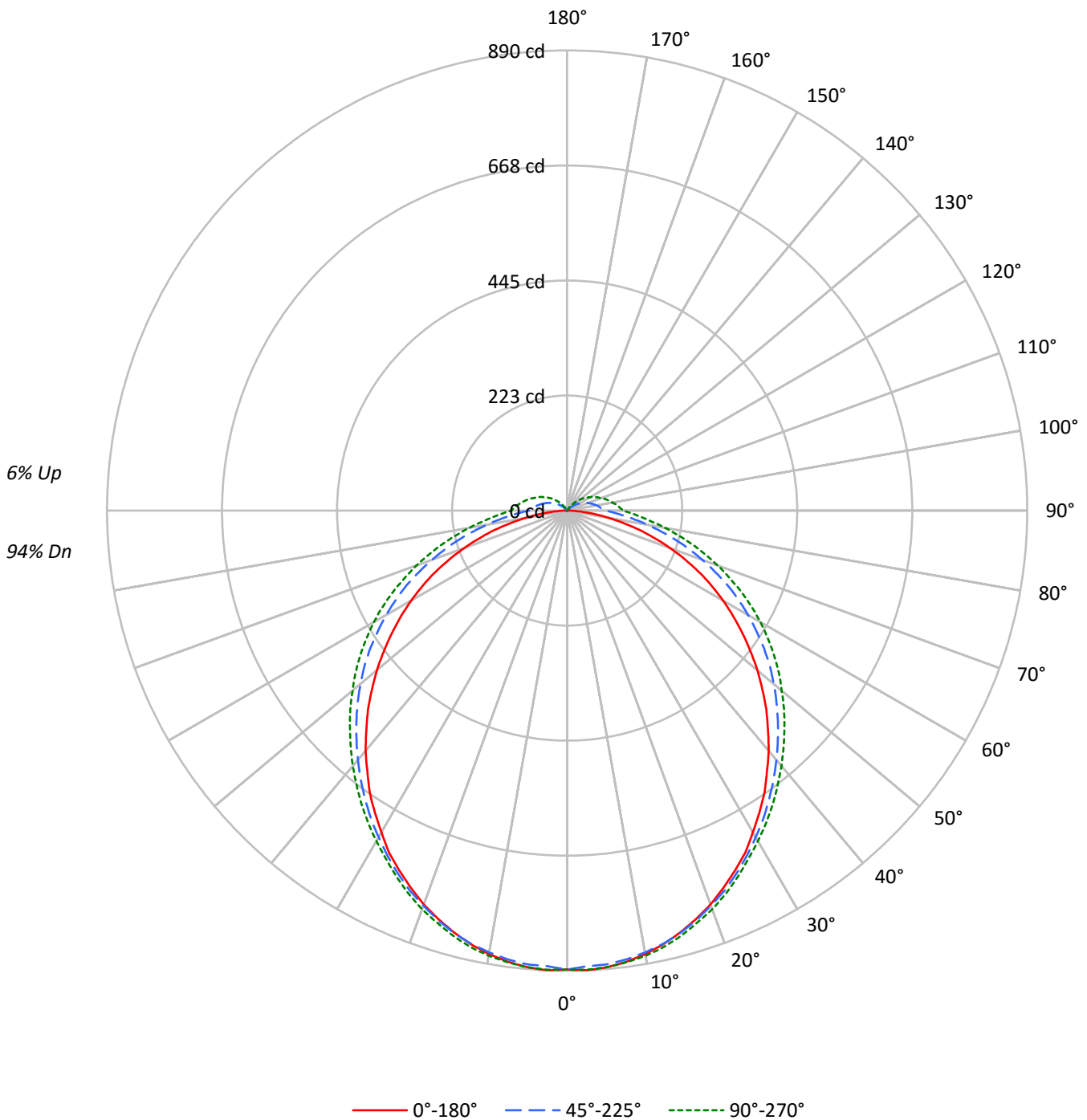
Lumens per Lamp: N/A  
Luminaire Lumens: 2797.5 lumens  
Efficiency: N/A  
Efficacy: 100.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.92' x H: 0.08')  
CIE Type: Direct

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°	6255	6255	6255
5°	6259	6143	6156
10°	6210	6033	6030
15°	6128	5908	5875
20°	6033	5748	5710
25°	5912	5589	5523
30°	5775	5416	5347
35°	5643	5249	5187
40°	5480	5082	5030
45°	5317	4929	4880
50°	5133	4775	4733
55°	4937	4615	4602
60°	4733	4425	4441
65°	4484	4214	4246
70°	4127	3932	4022
75°	3658	3637	3778
80°	2944	3283	3527
85°	2075	3035	3381



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.0	3.0
10°-20°	239.2	8.5
20°-30°	357.7	12.8
30°-40°	426.6	15.2
40°-50°	443.5	15.9
50°-60°	410.7	14.7
60°-70°	331.9	11.9
70°-80°	220.5	7.9
80°-90°	112.2	4.0
90°-100°	63.8	2.3
100°-110°	47.9	1.7
110°-120°	32.0	1.1
120°-130°	18.1	0.6
130°-140°	7.9	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°	680.9	24.3
0°-40°	1107.5	39.6
0°-60°	1961.7	70.1
0°-90°	2626.3	93.9
90°-120°	143.7	5.1
90°-150°	171.2	6.1
90°-180°	171.0	6.1
0°-180°	2797.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	888	888	888	888	888	
5°	886	885	881	886	886	84
15°	845	847	846	852	851	238
25°	768	774	774	782	781	354
35°	666	674	681	691	693	416
45°	545	561	577	591	594	420
55°	414	438	465	482	489	370
65°	281	310	343	365	371	278
75°	145	179	216	241	249	153
85°	32	69	109	135	144	37
90°	0	35	74	100	108	2
95°	0	29	65	90	99	0
105°	0	18	50	72	80	1
115°	0	8	35	55	62	0
125°	1	1	20	37	43	1
135°	1	0	7	20	24	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°	887.6	887.6	887.6	887.6	887.6
2.5°	889.8	888.7	882.1	888.7	888.7
5°	886.5	885.4	881.0	886.5	886.5
7.5°	879.9	879.9	875.5	882.1	881.0
10°	871.1	872.2	867.8	874.4	874.4
12.5°	859.0	860.1	858.0	864.5	864.5
15°	844.8	847.0	845.9	852.5	851.4
17.5°	828.3	832.7	830.5	837.1	836.0
20°	810.7	815.1	812.9	820.6	820.6
22.5°	789.8	795.3	795.3	801.9	801.9
25°	767.9	774.5	774.5	782.2	781.1
27.5°	745.9	752.5	752.5	760.2	759.1
30°	718.4	727.2	729.4	738.2	738.2
32.5°	692.1	702.0	706.4	714.0	716.2
35°	665.7	674.5	681.1	691.0	693.2
37.5°	634.9	648.1	655.8	667.9	669.0
40°	606.4	619.6	629.5	642.6	644.8
42.5°	574.5	591.0	603.1	617.4	619.6
45°	544.9	561.3	576.7	591.0	594.3
47.5°	511.9	531.7	549.3	564.6	569.0
50°	480.1	500.9	521.8	538.3	541.6
52.5°	447.1	470.2	494.3	510.8	516.3
55°	414.1	438.3	464.7	482.3	488.8
57.5°	381.2	407.6	433.9	453.7	460.3
60°	348.2	374.6	404.3	424.0	431.7
62.5°	315.3	341.6	373.5	394.4	402.1
65°	281.2	309.8	342.7	364.7	371.3
67.5°	246.1	276.8	309.8	332.9	339.4
70°	212.0	243.9	277.9	302.1	309.8
72.5°	178.0	210.9	247.2	271.3	279.0
75°	145.0	179.1	216.4	240.6	249.4
77.5°	112.0	148.3	185.7	210.9	219.7
80°	81.3	118.6	157.1	182.4	192.2
82.5°	54.9	92.3	131.8	158.2	165.9
85°	31.9	69.2	108.8	135.1	143.9
87.5°	14.3	50.5	90.1	115.3	124.1
90°	0.0	35.2	73.6	100.0	107.7
92.5°	0.0	31.9	69.2	94.5	103.3
95°	0.0	28.6	64.8	90.1	98.9
97.5°	0.0	26.4	61.5	85.7	94.5
100°	0.0	23.1	58.2	81.3	89.0
102.5°	0.0	20.9	53.8	76.9	84.6
105°	0.0	17.6	50.5	72.5	80.2
107.5°	1.1	15.4	46.1	68.1	75.8
110°	1.1	13.2	42.8	63.7	70.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	9.9	38.4	59.3	65.9
115°	0.0	7.7	35.2	54.9	61.5
117.5°	0.0	5.5	30.8	50.5	57.1
120°	1.1	3.3	27.5	46.1	51.6
122.5°	1.1	1.1	24.2	40.6	47.2
125°	1.1	1.1	19.8	37.3	42.8
127.5°	0.0	1.1	16.5	33.0	38.4
130°	1.1	0.0	13.2	28.6	34.1
132.5°	1.1	1.1	9.9	24.2	29.7
135°	1.1	0.0	6.6	19.8	24.2
137.5°	1.1	0.0	4.4	15.4	19.8
140°	1.1	1.1	1.1	12.1	15.4
142.5°	1.1	1.1	0.0	7.7	11.0
145°	1.1	1.1	0.0	4.4	7.7
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)