

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: P334311

Luminaire Tested: **S125DS-S610D840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334311  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DS-S610D840-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT LED LUMINAIRE, DROP SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 610 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2291.2 lumens  
Efficiency: N/A  
Efficacy: 121.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Direct

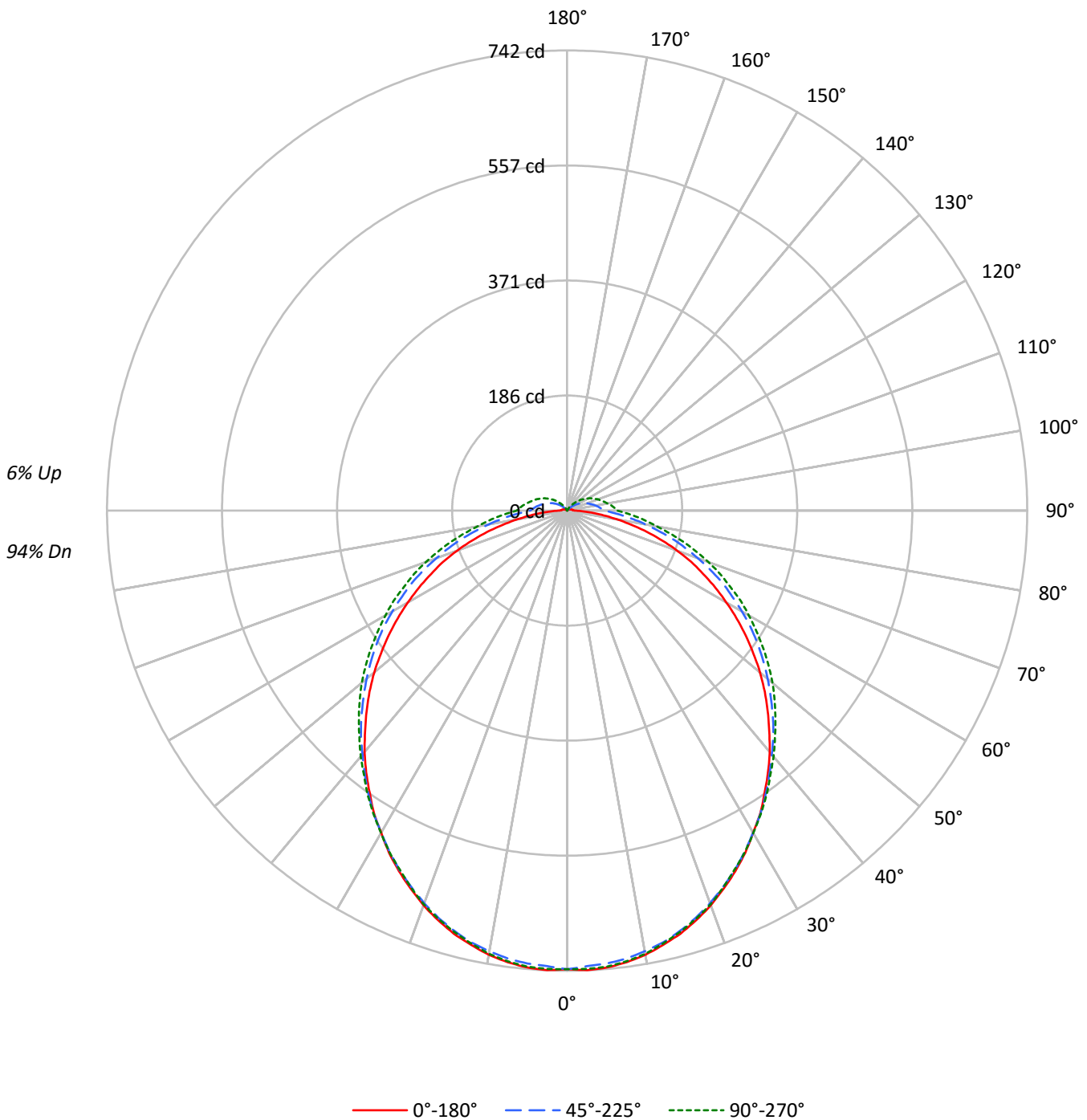
Input Watts (W): 18.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65	63
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	53
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47	45
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41	39
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32	30
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	27
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4777	4777	4777
5°	4795	4753	4786
10°	4770	4732	4760
15°	4722	4693	4703
20°	4655	4630	4645
25°	4573	4557	4552
30°	4472	4472	4477
35°	4379	4402	4419
40°	4285	4328	4365
45°	4179	4285	4337
50°	4080	4240	4342
55°	3960	4221	4344
60°	3831	4206	4374
65°	3701	4222	4432
70°	3559	4232	4573
75°	3329	4379	4831
80°	3046	4772	5475
85°	2957	6610	8218



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.0	3.1
10°-20°	198.7	8.7
20°-30°	295.4	12.9
30°-40°	349.9	15.3
40°-50°	361.7	15.8
50°-60°	333.2	14.5
60°-70°	269.4	11.8
70°-80°	180.2	7.9
80°-90°	93.2	4.1
90°-100°	52.5	2.3
100°-110°	38.7	1.7
110°-120°	25.9	1.1
120°-130°	14.7	0.6
130°-140°	6.4	0.3
140°-150°	1.3	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	564.1	24.6
0°-40°	914.0	39.9
0°-60°	1609.0	70.2
0°-90°	2151.8	93.9
90°-120°	117.1	5.1
90°-150°	139.4	6.1
90°-180°	139.0	6.1
0°-180°	2291.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	740	740	740	740	740	
5°	740	738	733	739	738	70
15°	706	707	702	706	703	199
25°	642	644	640	642	639	295
35°	555	560	558	560	560	348
45°	458	466	469	474	475	353
55°	352	363	375	383	386	314
65°	242	259	276	287	290	240
75°	133	152	176	190	194	141
85°	40	64	89	105	111	42
90°	12	35	60	76	81	8
95°	9	28	53	69	74	7
105°	6	18	40	54	60	7
115°	4	9	28	41	46	4
125°	3	2	17	28	32	2
135°	2	1	6	15	19	1
145°	1	0	0	4	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



TEST NUMBER: P334311

CATALOG NUMBER: S125DS-S610D840-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	739.6	739.6	739.6	739.6	739.6
2.5°	741.8	740.3	735.3	740.3	739.6
5°	739.6	738.2	733.1	738.9	738.2
7.5°	734.5	733.8	728.7	733.8	733.1
10°	727.3	727.3	721.5	726.6	725.8
12.5°	717.1	717.9	713.5	717.1	715.0
15°	706.3	707.0	701.9	706.3	703.4
17.5°	692.5	693.9	688.9	692.5	690.3
20°	677.3	678.7	673.6	675.8	675.8
22.5°	659.8	662.7	656.9	659.8	657.7
25°	641.7	643.9	639.5	642.4	638.8
27.5°	622.1	625.0	620.0	622.1	620.7
30°	599.7	604.0	599.7	601.1	600.4
32.5°	579.4	583.0	580.1	581.5	580.8
35°	555.4	560.5	558.3	560.5	560.5
37.5°	532.2	536.6	535.9	538.8	538.0
40°	508.3	514.1	513.4	516.3	517.7
42.5°	482.2	490.2	492.3	496.0	496.0
45°	457.5	465.5	469.1	474.2	474.9
47.5°	432.2	439.4	445.2	452.5	453.9
50°	406.1	414.0	422.0	430.0	432.2
52.5°	378.5	388.7	398.8	407.5	409.0
55°	351.7	363.3	374.9	382.9	385.8
57.5°	324.1	337.9	351.0	359.7	361.8
60°	296.6	311.1	325.6	336.5	338.6
62.5°	269.7	284.2	300.2	312.5	315.4
65°	242.2	258.9	276.3	287.1	290.0
67.5°	216.8	232.8	250.2	263.2	266.8
70°	188.5	205.2	224.1	237.8	242.2
72.5°	161.0	178.4	199.4	214.6	217.5
75°	133.4	152.3	175.5	190.0	193.6
77.5°	106.6	128.3	150.1	166.0	169.0
80°	81.9	103.7	128.3	144.3	147.2
82.5°	59.5	82.7	108.0	123.3	129.1
85°	39.9	63.8	89.2	105.1	110.9
87.5°	25.4	48.6	73.2	89.9	95.0
90°	11.6	34.8	59.5	76.1	81.2
92.5°	10.2	31.2	56.6	72.5	77.6
95°	9.4	28.3	52.9	68.9	74.0
97.5°	8.7	26.1	50.0	65.3	70.3
100°	8.0	23.2	46.4	61.6	66.0
102.5°	7.3	21.0	43.5	58.0	62.4
105°	6.5	18.1	39.9	54.4	59.5
107.5°	5.8	16.0	37.0	51.5	55.8
110°	5.1	13.8	34.1	47.9	52.9



TEST NUMBER: P334311

CATALOG NUMBER: S125DS-S610D840-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	5.1	11.6	31.2	44.2	49.3
115°	4.4	9.4	28.3	41.3	45.7
117.5°	3.6	7.3	25.4	37.7	42.8
120°	3.6	5.8	22.5	34.8	39.2
122.5°	2.9	3.6	19.6	31.2	35.5
125°	2.9	2.2	16.7	28.3	31.9
127.5°	2.2	1.5	13.8	24.7	29.0
130°	2.2	1.5	11.6	21.8	25.4
132.5°	1.5	1.5	8.7	18.9	21.8
135°	1.5	0.7	5.8	15.2	18.9
137.5°	1.5	0.7	3.6	12.3	15.2
140°	0.7	0.7	1.5	9.4	12.3
142.5°	0.7	0.0	0.0	6.5	9.4
145°	0.7	0.0	0.0	3.6	6.5
147.5°	0.0	0.0	0.0	1.5	2.9
150°	0.0	0.0	0.0	0.0	0.7
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)