

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: P334416

Luminaire Tested: **S125RDW-S610D840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334416  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDW-S610D840-4F0-1E-UDD-F  
Description: DEFINE 5 REGRESSED DIRECT LED LUMINAIRE, FLUSH 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: 2268.3 lumens  
Efficiency: N/A  
Efficacy: 120.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Direct

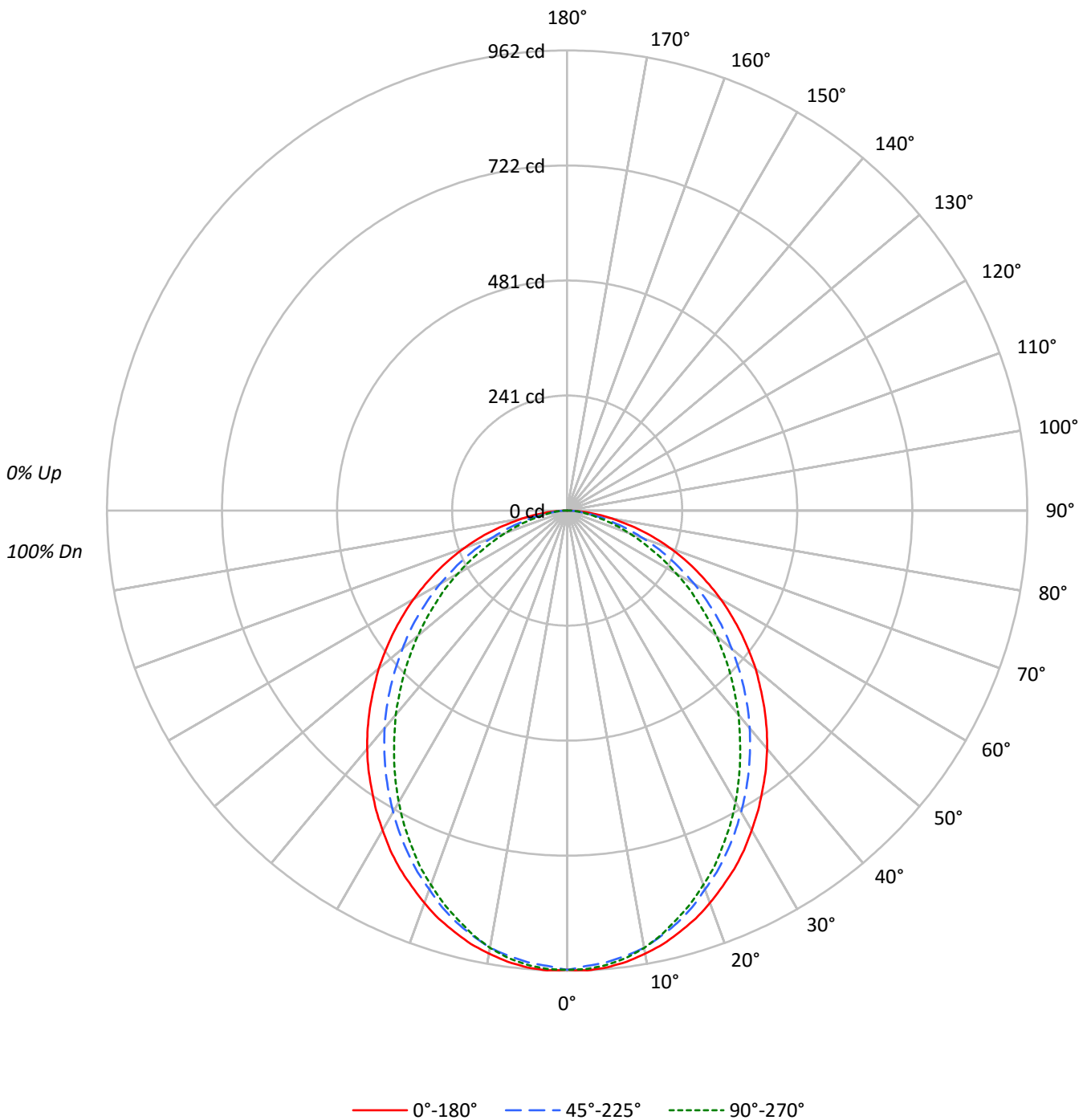
Input Watts (W): 18.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	80	98	90	84	79	87	82	78	84	79	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61					61			
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55	53					53			
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46					46			
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41					41			
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36					36			
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	33					33			
9	58	45	37	32	57	45	37	32	44	37	32	42	36	31	41	36	31	29					29			
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27					27			

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

	0°	45°	90°
0°	6200	6200	6200
5°	6215	6144	6182
10°	6168	6086	6086
15°	6094	5963	5915
20°	6000	5791	5721
25°	5890	5622	5498
30°	5753	5424	5251
35°	5614	5219	4973
40°	5483	5007	4701
45°	5325	4769	4404
50°	5165	4509	4094
55°	4980	4262	3764
60°	4796	3962	3409
65°	4577	3613	3003
70°	4326	3176	2587
75°	3980	2677	2153
80°	3507	2105	1808
85°	2957	1719	1615



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.4	4.0
10°-20°	252.5	11.1
20°-30°	366.1	16.1
30°-40°	417.1	18.4
40°-50°	406.6	17.9
50°-60°	342.2	15.1
60°-70°	239.8	10.6
70°-80°	122.9	5.4
80°-90°	30.7	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	709.0	31.3
0°-40°	1126.1	49.6
0°-60°	1874.9	82.7
0°-90°	2268.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2268.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	960	960	960	960	960	
5°	959	956	948	955	954	91
15°	912	907	892	891	885	257
25°	827	816	789	780	772	380
35°	712	695	662	641	631	446
45°	583	562	522	493	482	450
55°	442	419	378	346	334	396
65°	300	275	236	207	196	297
75°	160	138	107	91	86	169
85°	40	27	23	22	22	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	960.0	960.0	960.0	960.0	960.0
2.5°	962.2	960.0	952.8	960.0	959.3
5°	958.6	955.7	947.7	955.0	953.5
7.5°	951.3	948.4	939.0	944.8	943.4
10°	940.5	938.3	928.1	930.3	928.1
12.5°	928.1	925.2	910.7	912.2	908.6
15°	911.5	907.1	891.9	891.2	884.6
17.5°	894.1	887.5	869.4	865.8	860.7
20°	873.0	865.8	842.6	839.0	832.4
22.5°	849.8	842.6	817.9	809.9	804.9
25°	826.6	815.7	788.9	779.5	771.5
27.5°	800.5	787.5	759.2	746.9	738.9
30°	771.5	757.7	727.3	710.6	704.1
32.5°	743.2	726.6	695.4	676.5	667.8
35°	712.1	694.7	662.0	641.0	630.8
37.5°	682.3	661.3	627.9	603.3	593.1
40°	650.4	628.7	593.9	566.3	557.6
42.5°	617.1	594.6	558.3	532.2	518.5
45°	583.0	562.0	522.1	493.1	482.2
47.5°	547.5	525.7	485.8	456.1	443.8
50°	514.1	490.2	448.8	418.4	407.5
52.5°	477.8	453.2	414.8	381.4	370.5
55°	442.3	419.1	378.5	345.9	334.3
57.5°	406.1	381.4	342.3	310.3	300.2
60°	371.3	345.9	306.7	274.8	263.9
62.5°	334.3	310.3	270.5	241.5	230.6
65°	299.5	274.8	236.4	207.4	196.5
67.5°	264.7	240.0	203.0	175.5	166.8
70°	229.1	204.5	168.2	145.7	137.0
72.5°	194.3	170.4	137.0	116.7	111.7
75°	159.5	137.8	107.3	91.4	86.3
77.5°	124.0	106.6	81.2	68.9	64.5
80°	94.3	76.9	56.6	50.0	48.6
82.5°	65.3	50.0	37.7	35.5	34.8
85°	39.9	26.8	23.2	22.5	21.8
87.5°	16.7	11.6	10.9	10.9	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)