

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: P242894

Luminaire Tested: **S125RDR-S610D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242894  
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: S125RDR-S610D935-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1933.9 lumens  
Efficiency: N/A  
Efficacy: 102.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')  
CIE Type: Direct

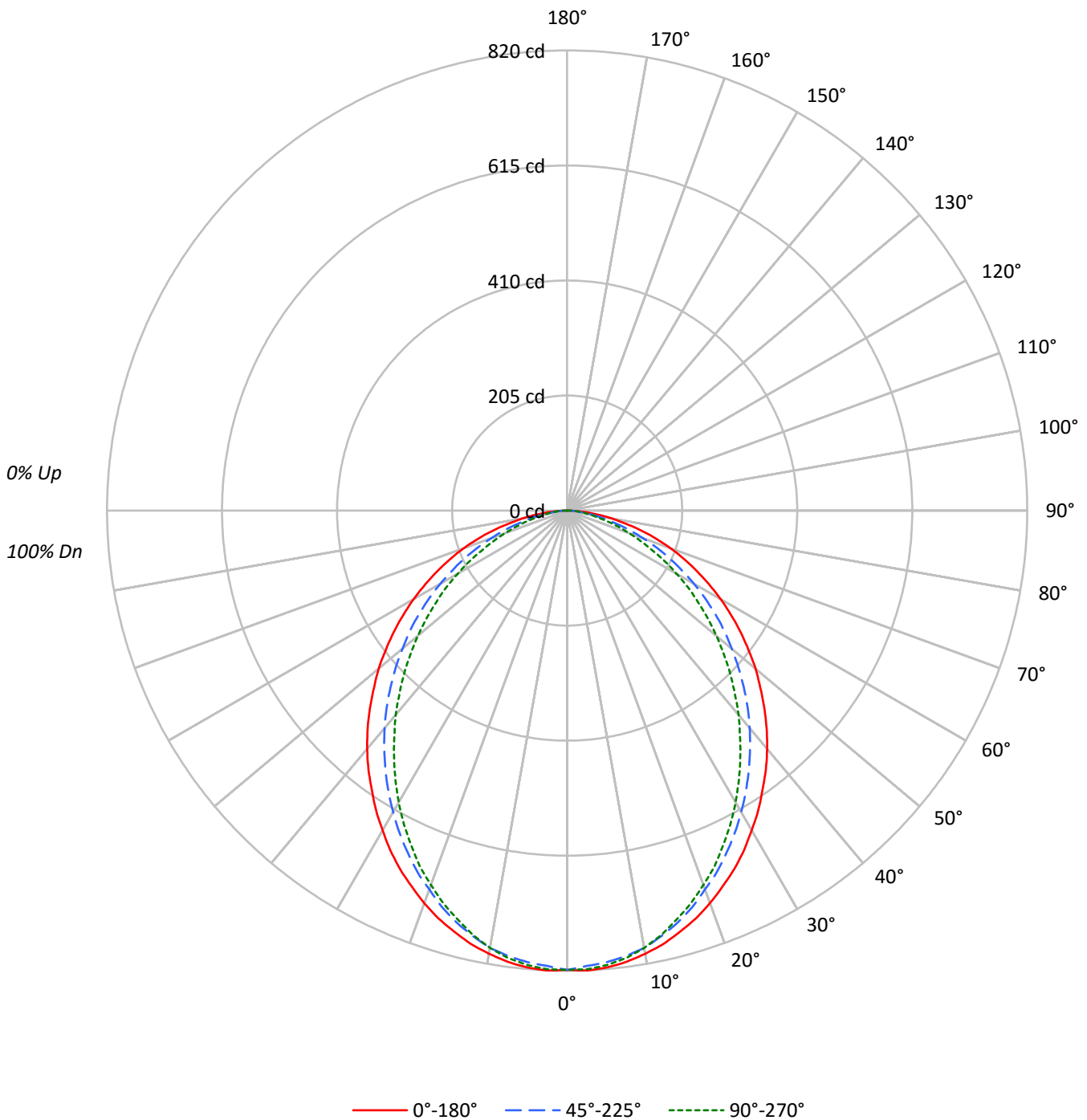
Input Watts (W): 18.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	5817	5817	5817
5°	5831	5765	5800
10°	5787	5711	5711
15°	5718	5595	5549
20°	5629	5434	5368
25°	5527	5275	5159
30°	5398	5089	4927
35°	5267	4897	4667
40°	5145	4697	4411
45°	4995	4474	4132
50°	4846	4232	3841
55°	4673	3999	3532
60°	4499	3717	3198
65°	4293	3389	2817
70°	4061	2980	2427
75°	3735	2513	2021
80°	3291	1973	1694
85°	2773	1615	1509



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.0	4.0
10°-20°	215.3	11.1
20°-30°	312.2	16.1
30°-40°	355.6	18.4
40°-50°	346.6	17.9
50°-60°	291.7	15.1
60°-70°	204.4	10.6
70°-80°	104.8	5.4
80°-90°	26.1	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°	604.5	31.3
0°-40°	960.1	49.6
0°-60°	1598.5	82.7
0°-90°	1933.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1933.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	817	815	808	814	813	78
15°	777	773	760	760	754	219
25°	705	696	673	665	658	324
35°	607	592	564	546	538	380
45°	497	479	445	420	411	383
55°	377	357	323	295	285	337
65°	255	234	202	177	168	253
75°	136	118	92	78	74	144
85°	34	23	20	19	18	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	818.5	818.5	818.5	818.5	818.5
2.5°	820.4	818.5	812.3	818.5	817.9
5°	817.3	814.8	808.0	814.2	813.0
7.5°	811.1	808.6	800.6	805.5	804.3
10°	801.8	800.0	791.3	793.2	791.3
12.5°	791.3	788.8	776.5	777.7	774.6
15°	777.1	773.4	760.4	759.8	754.2
17.5°	762.3	756.7	741.2	738.2	733.8
20°	744.3	738.2	718.4	715.3	709.7
22.5°	724.6	718.4	697.4	690.6	686.2
25°	704.8	695.5	672.6	664.6	657.8
27.5°	682.5	671.4	647.3	636.8	630.0
30°	657.8	646.0	620.1	605.9	600.3
32.5°	633.7	619.5	592.9	576.8	569.4
35°	607.1	592.3	564.4	546.5	537.9
37.5°	581.7	563.8	535.4	514.4	505.7
40°	554.5	536.0	506.3	482.8	475.4
42.5°	526.1	506.9	476.0	453.8	442.0
45°	497.0	479.1	445.1	420.4	411.1
47.5°	466.8	448.2	414.2	388.9	378.4
50°	438.3	417.9	382.7	356.7	347.4
52.5°	407.4	386.4	353.6	325.2	315.9
55°	377.1	357.3	322.7	294.9	285.0
57.5°	346.2	325.2	291.8	264.6	255.9
60°	316.5	294.9	261.5	234.3	225.0
62.5°	285.0	264.6	230.6	205.9	196.6
65°	255.3	234.3	201.5	176.8	167.5
67.5°	225.7	204.6	173.1	149.6	142.2
70°	195.4	174.3	143.4	124.3	116.8
72.5°	165.7	145.3	116.8	99.5	95.2
75°	136.0	117.5	91.5	77.9	73.6
77.5°	105.7	90.9	69.2	58.7	55.0
80°	80.4	65.5	48.2	42.7	41.4
82.5°	55.6	42.7	32.1	30.3	29.7
85°	34.0	22.9	19.8	19.2	18.5
87.5°	14.2	9.9	9.3	9.3	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)