

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: P242899

Luminaire Tested: **S125RDR-S610D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242899  
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-S610D940-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2002.9 lumens  
Efficiency: N/A  
Efficacy: 106.5 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

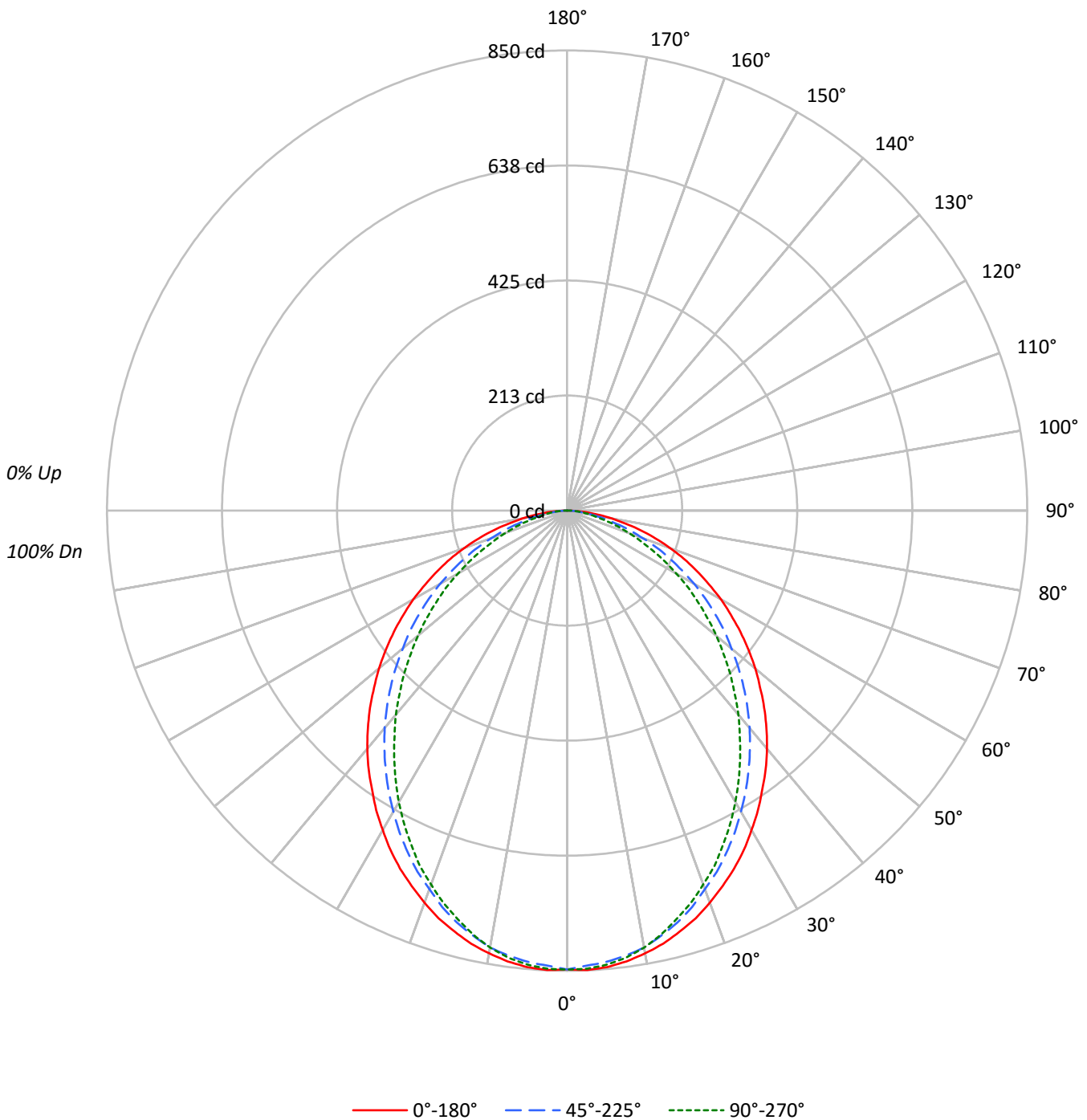
Input Watts (W): 18.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	6025	6025	6025
5°	6039	5970	6007
10°	5993	5914	5914
15°	5922	5794	5747
20°	5831	5627	5559
25°	5724	5463	5342
30°	5591	5270	5102
35°	5455	5072	4833
40°	5328	4865	4568
45°	5174	4634	4280
50°	5020	4382	3978
55°	4840	4141	3658
60°	4660	3849	3313
65°	4447	3510	2918
70°	4204	3086	2514
75°	3869	2603	2093
80°	3405	2042	1756
85°	2870	1672	1566



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.8	4.0
10°-20°	223.0	11.1
20°-30°	323.3	16.1
30°-40°	368.3	18.4
40°-50°	359.0	17.9
50°-60°	302.1	15.1
60°-70°	211.7	10.6
70°-80°	108.6	5.4
80°-90°	27.1	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°	626.1	31.3
0°-40°	994.4	49.6
0°-60°	1655.5	82.7
0°-90°	2002.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2002.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	848	848	848	848	848	
5°	846	844	837	843	842	80
15°	805	801	788	787	781	227
25°	730	720	697	688	681	336
35°	629	613	585	566	557	394
45°	515	496	461	435	426	397
55°	391	370	334	305	295	349
65°	264	243	209	183	174	262
75°	141	122	95	81	76	149
85°	35	24	20	20	19	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	847.7	847.7	847.7	847.7	847.7
2.5°	849.6	847.7	841.3	847.7	847.1
5°	846.4	843.9	836.8	843.2	842.0
7.5°	840.0	837.5	829.2	834.3	833.0
10°	830.4	828.5	819.5	821.5	819.5
12.5°	819.5	817.0	804.2	805.5	802.3
15°	804.8	801.0	787.5	786.9	781.1
17.5°	789.5	783.7	767.7	764.5	760.0
20°	770.9	764.5	744.0	740.8	735.0
22.5°	750.4	744.0	722.2	715.2	710.7
25°	729.9	720.3	696.6	688.3	681.2
27.5°	706.9	695.3	670.4	659.5	652.4
30°	681.2	669.1	642.2	627.5	621.7
32.5°	656.3	641.6	614.0	597.4	589.7
35°	628.7	613.4	584.6	566.0	557.0
37.5°	602.5	583.9	554.5	532.7	523.7
40°	574.3	555.1	524.4	500.1	492.4
42.5°	544.9	525.0	493.0	470.0	457.8
45°	514.8	496.2	461.0	435.4	425.8
47.5°	483.4	464.2	429.0	402.7	391.8
50°	454.0	432.8	396.3	369.4	359.8
52.5°	421.9	400.2	366.2	336.8	327.2
55°	390.6	370.1	334.2	305.4	295.2
57.5°	358.6	336.8	302.2	274.0	265.1
60°	327.8	305.4	270.8	242.7	233.1
62.5°	295.2	274.0	238.8	213.2	203.6
65°	264.4	242.7	208.7	183.1	173.5
67.5°	233.7	211.9	179.3	154.9	147.3
70°	202.3	180.6	148.5	128.7	121.0
72.5°	171.6	150.5	121.0	103.1	98.6
75°	140.9	121.7	94.8	80.7	76.2
77.5°	109.5	94.1	71.7	60.8	57.0
80°	83.2	67.9	49.9	44.2	42.9
82.5°	57.6	44.2	33.3	31.4	30.7
85°	35.2	23.7	20.5	19.8	19.2
87.5°	14.7	10.2	9.6	9.6	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)