

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: P243759

Luminaire Tested: **S125RDR-H610D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243759  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-66)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H610D940-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1986.5 lumens  
Efficiency: N/A  
Efficacy: 115.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26  
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')  
CIE Type: Direct

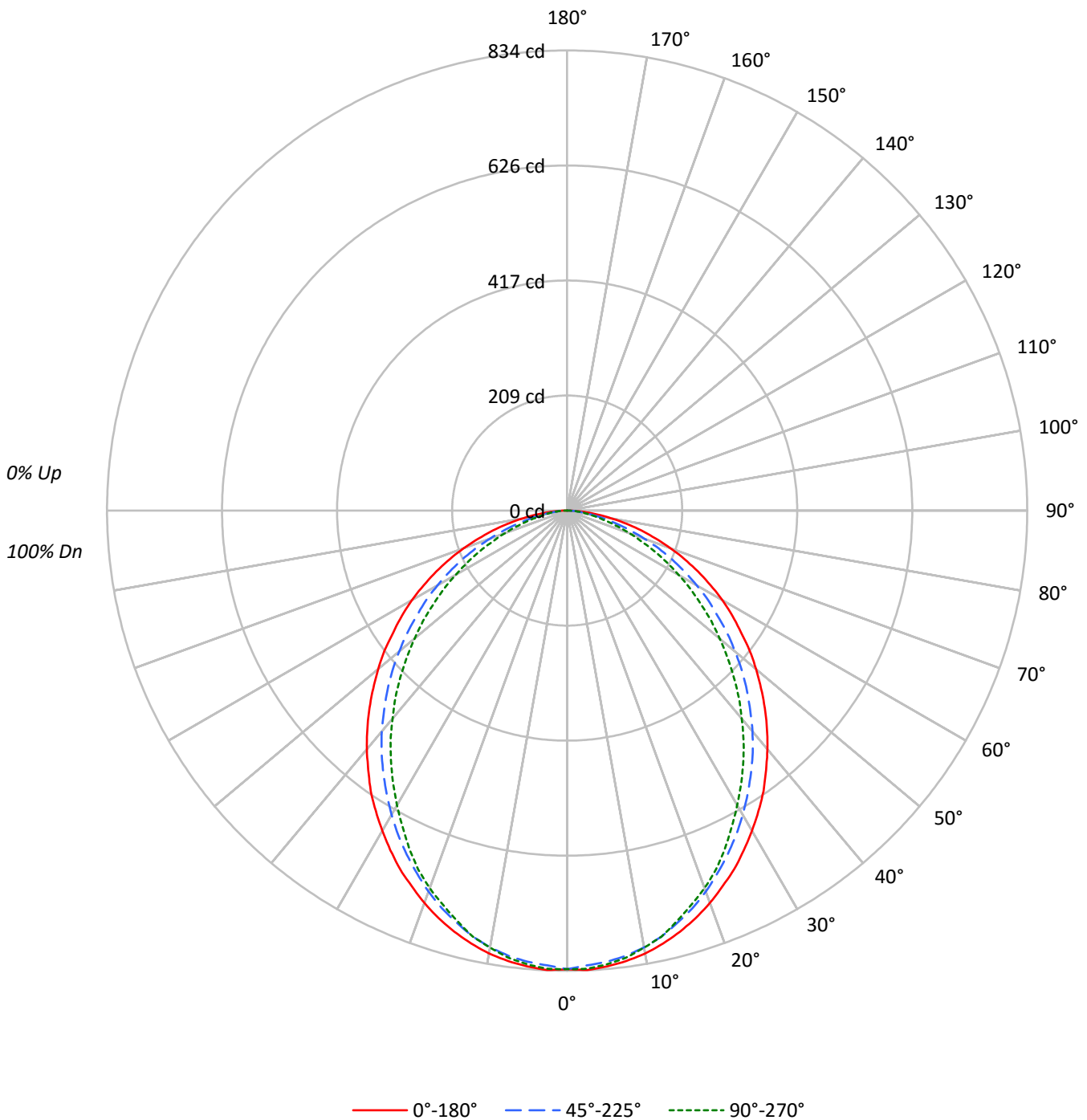
Input Watts (W): 17.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28

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

	0°	45°	90°
0°	5907	5907	5907
5°	5917	5857	5891
10°	5882	5800	5805
15°	5814	5691	5665
20°	5724	5558	5508
25°	5623	5394	5305
30°	5499	5225	5060
35°	5385	5039	4828
40°	5240	4849	4567
45°	5091	4631	4296
50°	4944	4391	3990
55°	4766	4125	3669
60°	4623	3854	3321
65°	4399	3530	2940
70°	4150	3088	2508
75°	3820	2579	2040
80°	3356	1993	1678
85°	2862	1647	1549



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.3	3.9
10°-20°	219.3	11.0
20°-30°	319.1	16.1
30°-40°	365.4	18.4
40°-50°	357.5	18.0
50°-60°	301.9	15.2
60°-70°	211.4	10.6
70°-80°	107.3	5.4
80°-90°	26.4	1.3
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°	616.6	31.0
0°-40°	982.0	49.4
0°-60°	1641.4	82.6
0°-90°	1986.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1986.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	831	831	831	831	831	
5°	829	828	821	826	826	79
15°	790	787	773	773	770	223
25°	717	709	688	681	676	330
35°	621	606	581	564	556	388
45°	506	490	461	436	427	391
55°	385	368	333	306	296	345
65°	262	241	210	184	175	259
75°	139	122	94	78	74	147
85°	35	23	20	19	19	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	831.1	831.1	831.1	831.1	831.1
2.5°	833.5	831.7	825.1	831.1	831.1
5°	829.3	827.5	821.0	826.3	825.7
7.5°	823.4	821.6	813.9	819.2	817.4
10°	815.0	812.7	803.7	806.7	804.3
12.5°	803.7	801.4	790.7	791.9	790.7
15°	790.1	787.1	773.4	772.8	769.9
17.5°	774.6	770.5	755.6	753.8	749.1
20°	756.8	751.4	734.8	731.2	728.2
22.5°	736.6	731.2	711.6	706.3	704.5
25°	717.0	708.6	687.8	680.7	676.5
27.5°	693.8	684.3	662.9	653.3	646.2
30°	670.0	659.3	636.7	624.2	616.5
32.5°	645.6	633.1	608.8	593.3	586.8
35°	620.6	605.8	580.8	563.6	556.4
37.5°	592.1	577.2	552.3	532.1	525.5
40°	564.8	549.3	522.6	500.6	492.2
42.5°	536.2	520.2	491.0	467.9	460.7
45°	506.5	489.9	460.7	436.4	427.4
47.5°	476.8	460.1	429.8	405.4	394.1
50°	447.1	429.2	397.1	372.1	360.9
52.5°	417.3	397.7	366.2	339.5	329.3
55°	384.6	368.0	332.9	306.2	296.1
57.5°	355.5	337.1	303.8	276.4	265.1
60°	325.2	305.0	271.1	244.3	233.6
62.5°	293.1	272.9	240.2	213.4	203.9
65°	261.6	241.4	209.9	183.7	174.8
67.5°	230.1	211.0	179.5	155.2	145.1
70°	199.7	180.1	148.6	126.6	120.7
72.5°	167.6	152.2	120.7	101.1	96.3
75°	139.1	121.9	93.9	78.5	74.3
77.5°	110.0	93.3	69.6	58.9	55.3
80°	82.0	67.8	48.7	42.2	41.0
82.5°	56.5	42.8	32.1	30.9	30.3
85°	35.1	22.6	20.2	19.0	19.0
87.5°	14.9	9.5	9.5	8.9	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)