

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1062044

Luminaire Tested: S125RDR-H375D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062044  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H375D927-X4F0-XX-UDD-WVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

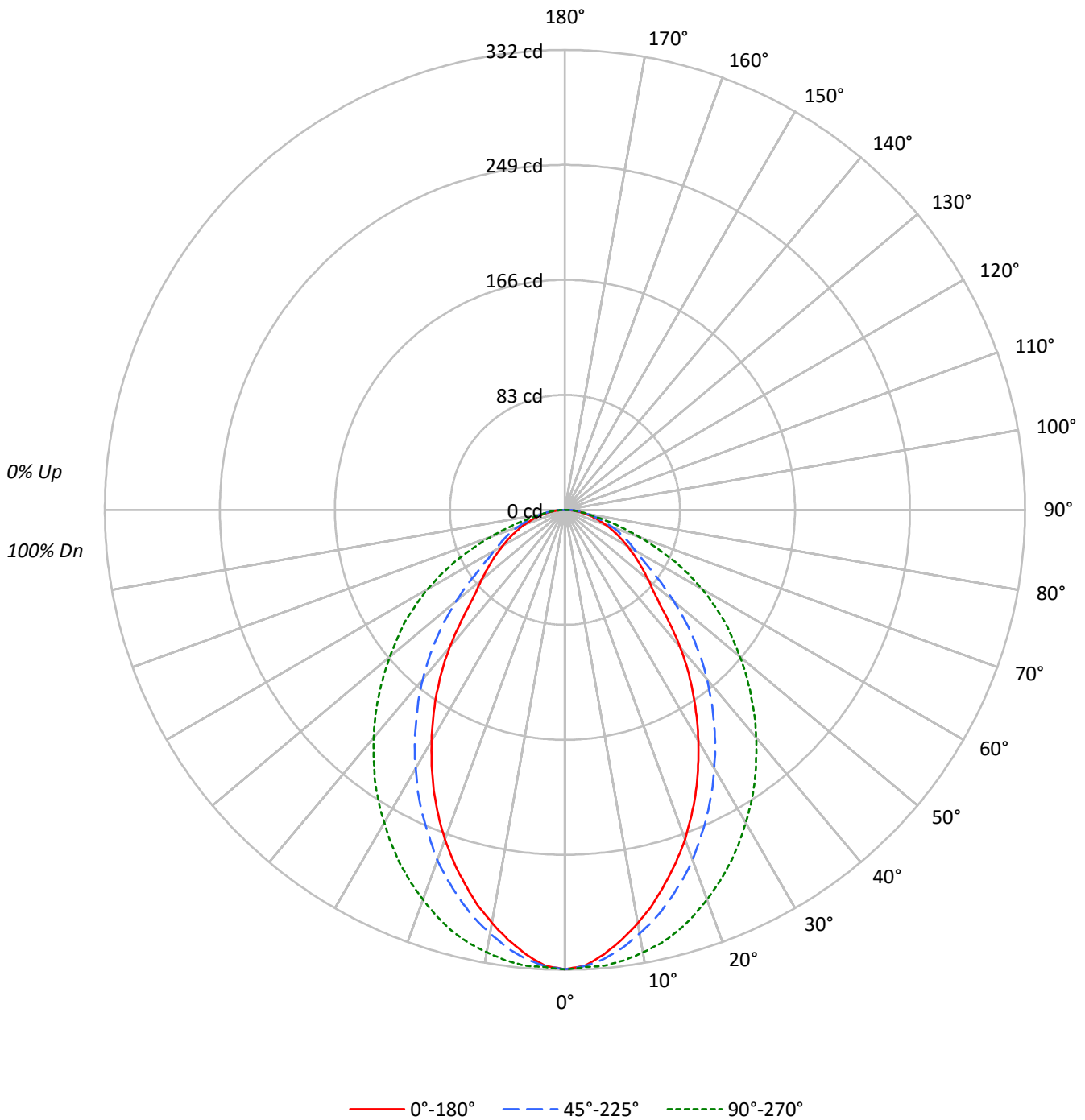
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 621.8 lumens  
Efficiency: N/A  
Efficacy: 53.1 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.7  
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: 24 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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30

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

	0°	45°	90°
0°	2284	2284	2284
5°	2226	2249	2284
10°	2118	2171	2268
15°	1991	2079	2244
20°	1854	1972	2194
25°	1699	1845	2139
30°	1530	1713	2073
35°	1353	1573	2008
40°	1161	1433	1930
45°	948	1275	1849
50°	841	1094	1764
55°	772	906	1690
60°	712	803	1574
65°	665	772	1404
70°	620	733	1147
75°	572	686	846
80°	539	642	619
85°	498	632	521

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1849 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.7	4.9
10°-20°	82.7	13.3
20°-30°	113.6	18.3
30°-40°	120.4	19.4
40°-50°	105.1	16.9
50°-60°	79.9	12.8
60°-70°	53.5	8.6
70°-80°	27.6	4.4
80°-90°	8.3	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°	227.0	36.5
0°-40°	347.4	55.9
0°-60°	532.4	85.6
0°-90°	621.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	621.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	332	332	332	332	332	
5°	322	325	325	328	330	30
15°	279	285	292	304	315	78
25°	224	231	243	263	282	103
35°	161	170	187	214	239	100
45°	97	107	131	162	190	77
55°	64	66	76	111	141	58
65°	41	42	47	63	86	40
75°	22	23	26	28	32	23
85°	6	8	8	7	7	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	331.7	331.7	331.7	331.7	331.7
2.5°	329.4	331.7	329.7	329.7	330.4
5°	322.1	325.4	325.4	327.7	330.4
7.5°	313.1	316.8	318.8	324.1	328.0
10°	302.9	306.8	310.5	318.4	324.4
12.5°	291.9	296.2	301.9	312.1	320.4
15°	279.3	284.6	291.6	304.5	314.8
17.5°	266.7	272.0	280.7	295.9	307.5
20°	253.1	258.8	269.1	285.6	299.5
22.5°	238.6	244.9	255.8	274.7	290.9
25°	223.7	230.6	242.9	263.1	281.6
27.5°	208.1	216.4	229.6	251.2	271.7
30°	192.5	200.8	215.4	238.9	260.8
32.5°	176.9	185.9	201.8	226.6	250.2
35°	161.0	170.3	187.2	213.7	238.9
37.5°	145.5	154.7	173.6	201.1	226.6
40°	129.2	138.8	159.4	188.2	214.7
42.5°	112.7	122.9	145.1	175.0	202.5
45°	97.4	107.0	130.9	162.0	189.9
47.5°	86.2	92.4	116.6	148.8	177.6
50°	78.5	81.8	102.1	135.9	164.7
52.5°	70.9	73.6	88.5	122.6	152.4
55°	64.3	66.3	75.5	111.0	140.8
57.5°	57.7	59.6	65.6	99.4	127.2
60°	51.7	53.3	58.3	87.1	114.3
62.5°	46.1	47.4	52.7	75.5	100.4
65°	40.8	41.7	47.4	63.3	86.2
67.5°	35.5	36.4	42.1	51.7	70.9
70°	30.8	31.1	36.4	42.1	57.0
72.5°	26.2	26.5	30.8	34.1	43.7
75°	21.5	22.9	25.8	27.5	31.8
77.5°	17.6	19.2	20.9	21.5	21.5
80°	13.6	15.6	16.2	16.2	15.6
82.5°	9.9	11.6	11.9	11.3	10.6
85°	6.3	8.0	8.0	7.3	6.6
87.5°	3.0	4.3	4.3	4.0	3.0
90°	0.0	0.0	0.0	0.0	0.0



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	9.47	10.97	9.84	11.28	11.60	13.40	14.90	13.77	15.21	15.53
	3H	11.04	12.39	11.42	12.71	13.08	14.83	16.17	15.20	16.50	16.86
	4H	11.66	12.92	12.06	13.27	13.64	15.24	16.50	15.64	16.85	17.23
	6H	12.15	13.32	12.57	13.68	14.08	15.46	16.62	15.87	16.99	17.38
	8H	12.33	13.43	12.75	13.82	14.23	15.51	16.62	15.94	17.01	17.41
	12H	12.45	13.51	12.88	13.89	14.32	15.55	16.61	15.98	16.99	17.42
4H	2H	10.21	11.47	10.61	11.82	12.20	13.53	14.79	13.93	15.14	15.52
	3H	11.99	13.03	12.40	13.43	13.84	15.14	16.18	15.55	16.58	16.99
	4H	12.73	13.67	13.16	14.08	14.52	15.67	16.61	16.10	17.02	17.46
	6H	13.36	14.18	13.82	14.62	15.08	16.01	16.83	16.47	17.27	17.73
	8H	13.59	14.36	14.05	14.80	15.27	16.11	16.87	16.57	17.32	17.78
	12H	13.76	14.45	14.25	14.93	15.40	16.18	16.86	16.66	17.34	17.81
8H	4H	13.13	13.89	13.59	14.34	14.80	15.77	16.54	16.24	16.98	17.45
	6H	13.91	14.55	14.41	15.04	15.52	16.21	16.84	16.71	17.33	17.81
	8H	14.24	14.80	14.75	15.31	15.80	16.37	16.94	16.88	17.45	17.93
	12H	14.51	15.01	15.02	15.51	16.07	16.50	17.01	17.01	17.50	18.06
12H	4H	13.17	13.85	13.65	14.33	14.80	15.77	16.46	16.26	16.93	17.41
	6H	14.00	14.56	14.51	15.07	15.56	16.23	16.79	16.74	17.30	17.79
	8H	14.39	14.89	14.90	15.39	15.95	16.44	16.94	16.95	17.43	17.99