

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



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061472

Luminaire Tested: S125RDRP-S1090D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061472  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S1090D927-X4F0-XX-UDD-BVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

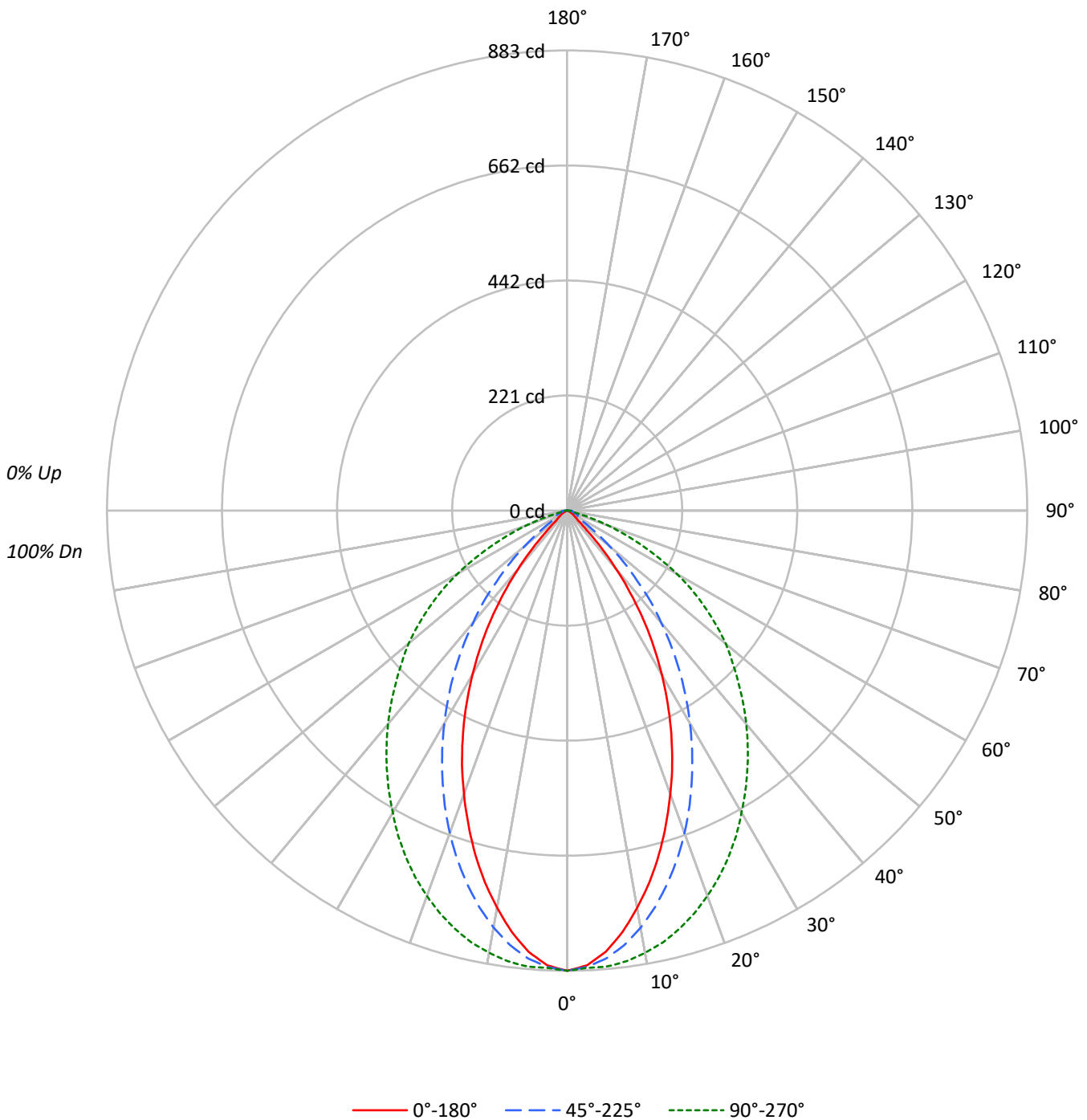
Lumens per Lamp: N/A  
Luminaire Lumens: 1142.5 lumens  
Efficiency: N/A  
Efficacy: 32.6 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35  
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: 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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

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

	0°	45°	90°
0°	6080	6080	6080
5°	5873	5961	6070
10°	5413	5680	6023
15°	4861	5288	5924
20°	4242	4824	5766
25°	3593	4301	5569
30°	2887	3745	5320
35°	2136	3159	5072
40°	1323	2522	4807
45°	516	1844	4519
50°	242	1156	4257
55°	176	495	3863
60°	121	351	3350
65°	80	368	2605
70°	79	336	1639
75°	104	341	521
80°	155	389	349
85°	229	774	545

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4519 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.0	7.1
10°-20°	209.8	18.4
20°-30°	267.3	23.4
30°-40°	248.8	21.8
40°-50°	171.2	15.0
50°-60°	96.9	8.5
60°-70°	45.8	4.0
70°-80°	14.3	1.3
80°-90°	7.4	0.7
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°	558.1	48.8
0°-40°	806.8	70.6
0°-60°	1075.0	94.1
0°-90°	1142.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1142.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	883	883	883	883	883	
5°	850	862	862	870	878	79
15°	682	704	742	798	831	190
25°	473	503	566	661	733	216
35°	254	290	376	504	603	157
45°	53	84	189	342	464	50
55°	15	17	41	197	322	14
65°	5	6	23	71	160	5
75°	4	9	13	14	20	4
85°	3	8	10	9	7	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	883.1	883.1	883.1	883.1	883.1
2.5°	873.3	882.1	876.2	877.2	878.2
5°	849.7	861.5	862.5	870.3	878.2
7.5°	815.4	830.1	840.9	859.5	872.3
10°	774.2	791.8	812.4	842.9	861.5
12.5°	730.0	750.6	779.1	822.3	848.8
15°	681.9	704.5	741.8	797.7	831.1
17.5°	630.9	656.4	701.6	768.3	810.5
20°	578.9	606.4	658.4	734.9	786.9
22.5°	526.9	555.4	613.3	698.6	761.4
25°	472.9	503.4	566.2	661.3	733.0
27.5°	418.0	449.4	519.1	623.1	702.6
30°	363.1	396.4	471.0	583.8	669.2
32.5°	309.1	342.4	423.9	544.6	636.8
35°	254.1	289.5	375.8	504.3	603.4
37.5°	199.2	237.5	328.7	463.1	569.1
40°	147.2	183.5	280.6	422.9	534.8
42.5°	98.1	133.4	237.5	382.7	499.4
45°	53.0	84.4	189.4	342.4	464.1
47.5°	28.5	45.1	148.2	303.2	429.8
50°	22.6	25.5	107.9	266.9	397.4
52.5°	18.6	20.6	70.6	232.5	360.1
55°	14.7	16.7	41.2	197.2	321.8
57.5°	11.8	13.7	26.5	163.9	284.6
60°	8.8	10.8	25.5	131.5	243.3
62.5°	6.9	7.8	23.5	101.1	200.2
65°	4.9	5.9	22.6	70.6	159.9
67.5°	3.9	4.9	20.6	45.1	119.7
70°	3.9	3.9	16.7	29.4	81.4
72.5°	3.9	6.9	14.7	19.6	49.1
75°	3.9	8.8	12.8	13.7	19.6
77.5°	3.9	9.8	10.8	10.8	10.8
80°	3.9	8.8	9.8	9.8	8.8
82.5°	3.9	7.8	8.8	9.8	7.8
85°	2.9	7.8	9.8	8.8	6.9
87.5°	2.9	7.8	8.8	7.8	4.9
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	0.00	0.00	0.00	0.00	0.00	15.52	16.81	15.88	17.12	17.44
	3H	0.00	0.00	0.00	0.00	0.00	16.24	17.38	16.62	17.71	18.07
	4H	0.00	0.00	0.00	0.00	0.37	16.26	17.32	16.66	17.67	18.06
	6H	0.00	0.81	0.25	1.18	1.57	16.21	17.19	16.63	17.56	17.95
	8H	0.47	1.39	0.90	1.78	2.19	16.19	17.11	16.62	17.50	17.91
	12H	1.05	1.93	1.48	2.32	2.75	16.17	17.05	16.60	17.44	17.87
4H	2H	0.03	1.09	0.43	1.44	1.82	15.31	16.37	15.71	16.72	17.11
	3H	0.84	1.70	1.25	2.11	2.51	16.06	16.93	16.48	17.34	17.74
	4H	1.84	2.61	2.27	3.03	3.48	16.09	16.87	16.53	17.29	17.73
	6H	3.11	3.78	3.58	4.23	4.69	16.07	16.74	16.54	17.19	17.65
	8H	3.69	4.31	4.16	4.76	5.23	16.06	16.68	16.53	17.13	17.60
	12H	4.24	4.79	4.73	5.28	5.75	16.06	16.61	16.55	17.10	17.57
8H	4H	3.26	3.88	3.73	4.33	4.80	15.98	16.60	16.45	17.05	17.52
	6H	4.81	5.32	5.32	5.82	6.30	15.97	16.47	16.47	16.97	17.45
	8H	5.60	6.06	6.12	6.57	7.07	15.98	16.43	16.50	16.95	17.44
	12H	6.43	6.83	6.95	7.33	7.90	16.04	16.44	16.55	16.94	17.51
12H	4H	3.48	4.03	3.97	4.51	4.99	15.93	16.48	16.42	16.97	17.44
	6H	5.18	5.64	5.71	6.16	6.65	15.92	16.38	16.44	16.89	17.38
	8H	6.17	6.57	6.68	7.06	7.64	15.97	16.37	16.48	16.86	17.44