

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: P1061477

Luminaire Tested: S125RDRP-S1090D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061477  
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: S125RDRP-S1090D927-X4F0-XX-UDD-WVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

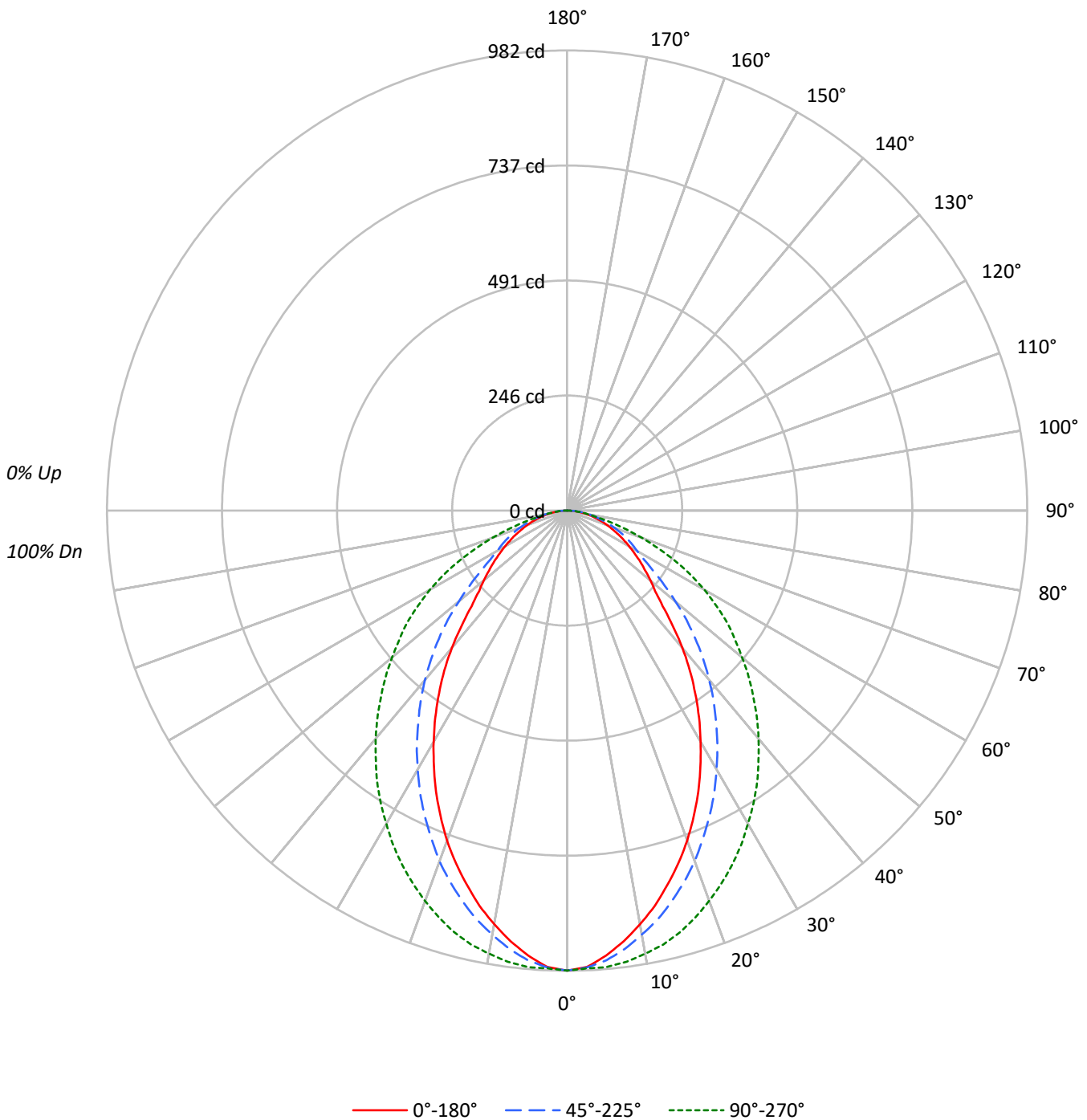
Lumens per Lamp: N/A  
Luminaire Lumens: 1840.2 lumens  
Efficiency: N/A  
Efficacy: 52.6 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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	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°	6759	6759	6759
5°	6588	6656	6757
10°	6266	6424	6712
15°	5893	6152	6641
20°	5489	5835	6495
25°	5029	5461	6333
30°	4530	5068	6136
35°	4006	4657	5943
40°	3438	4240	5712
45°	2807	3772	5471
50°	2489	3235	5221
55°	2284	2684	5003
60°	2107	2377	4659
65°	1965	2284	4154
70°	1836	2172	3396
75°	1695	2035	2503
80°	1594	1907	1828
85°	1469	1856	1548

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5471 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.8	4.9
10°-20°	244.7	13.3
20°-30°	336.3	18.3
30°-40°	356.4	19.4
40°-50°	311.1	16.9
50°-60°	236.4	12.8
60°-70°	158.4	8.6
70°-80°	81.7	4.4
80°-90°	24.5	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°	671.8	36.5
0°-40°	1028.3	55.9
0°-60°	1575.8	85.6
0°-90°	1840.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1840.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	982	982	982	982	982	
5°	953	963	963	970	978	89
15°	827	842	863	901	932	232
25°	662	683	719	779	834	303
35°	477	504	554	632	707	297
45°	288	317	387	480	562	228
55°	190	196	224	328	417	171
65°	121	124	140	187	255	120
75°	64	68	76	81	94	68
85°	19	24	24	22	20	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	981.7	981.7	981.7	981.7	981.7
2.5°	974.8	981.7	975.8	975.8	977.7
5°	953.2	963.0	963.0	969.9	977.7
7.5°	926.7	937.5	943.4	959.1	970.9
10°	896.3	908.1	918.9	942.4	960.1
12.5°	864.0	876.7	893.4	923.8	948.3
15°	826.7	842.4	863.0	901.2	931.6
17.5°	789.4	805.1	830.6	875.7	910.1
20°	749.2	765.9	796.3	845.3	886.5
22.5°	706.1	724.7	757.1	813.0	861.0
25°	662.0	682.6	718.8	778.7	833.6
27.5°	615.9	640.4	679.6	743.4	804.2
30°	569.8	594.3	637.4	707.1	771.8
32.5°	523.7	550.2	597.2	670.8	740.4
35°	476.6	504.1	554.1	632.5	707.1
37.5°	430.5	458.0	513.9	595.3	670.8
40°	382.5	410.9	471.7	557.0	635.5
42.5°	333.4	363.8	429.5	517.8	599.2
45°	288.3	316.8	387.4	479.6	561.9
47.5°	255.0	273.6	345.2	440.3	525.6
50°	232.4	242.2	302.0	402.1	487.4
52.5°	209.9	217.7	261.8	362.9	451.1
55°	190.3	196.1	223.6	328.5	416.8
57.5°	170.6	176.5	194.2	294.2	376.6
60°	153.0	157.9	172.6	257.9	338.3
62.5°	136.3	140.2	155.9	223.6	297.1
65°	120.6	123.6	140.2	187.3	255.0
67.5°	104.9	107.9	124.5	153.0	209.9
70°	91.2	92.2	107.9	124.5	168.7
72.5°	77.5	78.5	91.2	101.0	129.4
75°	63.7	67.7	76.5	81.4	94.1
77.5°	52.0	56.9	61.8	63.7	63.7
80°	40.2	46.1	48.1	48.1	46.1
82.5°	29.4	34.3	35.3	33.3	31.4
85°	18.6	23.5	23.5	21.6	19.6
87.5°	8.8	12.7	12.7	11.8	8.8
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	13.25	14.74	13.61	15.06	15.37	17.17	18.67	17.54	18.98	19.30
	3H	14.82	16.16	15.19	16.49	16.85	18.60	19.94	18.97	20.27	20.63
	4H	15.43	16.69	15.83	17.04	17.42	19.01	20.27	19.41	20.62	21.00
	6H	15.93	17.09	16.34	17.45	17.85	19.23	20.39	19.64	20.76	21.15
	8H	16.10	17.21	16.53	17.60	18.00	19.29	20.39	19.71	20.78	21.18
	12H	16.22	17.28	16.65	17.66	18.09	19.32	20.38	19.75	20.76	21.19
4H	2H	13.98	15.24	14.38	15.59	15.97	17.30	18.56	17.70	18.91	19.29
	3H	15.76	16.81	16.17	17.21	17.61	18.91	19.95	19.32	20.35	20.76
	4H	16.50	17.44	16.93	17.85	18.29	19.44	20.38	19.87	20.79	21.23
	6H	17.13	17.95	17.59	18.39	18.86	19.78	20.60	20.24	21.04	21.50
	8H	17.36	18.13	17.83	18.57	19.04	19.88	20.64	20.34	21.09	21.55
	12H	17.53	18.22	18.02	18.70	19.17	19.95	20.63	20.43	21.11	21.58
8H	4H	16.90	17.66	17.36	18.11	18.57	19.54	20.31	20.01	20.75	21.22
	6H	17.69	18.32	18.18	18.81	19.29	19.98	20.61	20.48	21.11	21.58
	8H	18.01	18.58	18.52	19.09	19.57	20.14	20.71	20.65	21.22	21.71
	12H	18.28	18.78	18.79	19.28	19.84	20.28	20.78	20.79	21.27	21.83
12H	4H	16.94	17.62	17.42	18.10	18.57	19.54	20.23	20.03	20.70	21.18
	6H	17.77	18.34	18.28	18.85	19.33	20.00	20.57	20.51	21.08	21.56
	8H	18.16	18.66	18.67	19.16	19.72	20.21	20.71	20.72	21.20	21.77