

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: P1061459

Luminaire Tested: S125RDRP-S1090D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061459  
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-S1090D840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

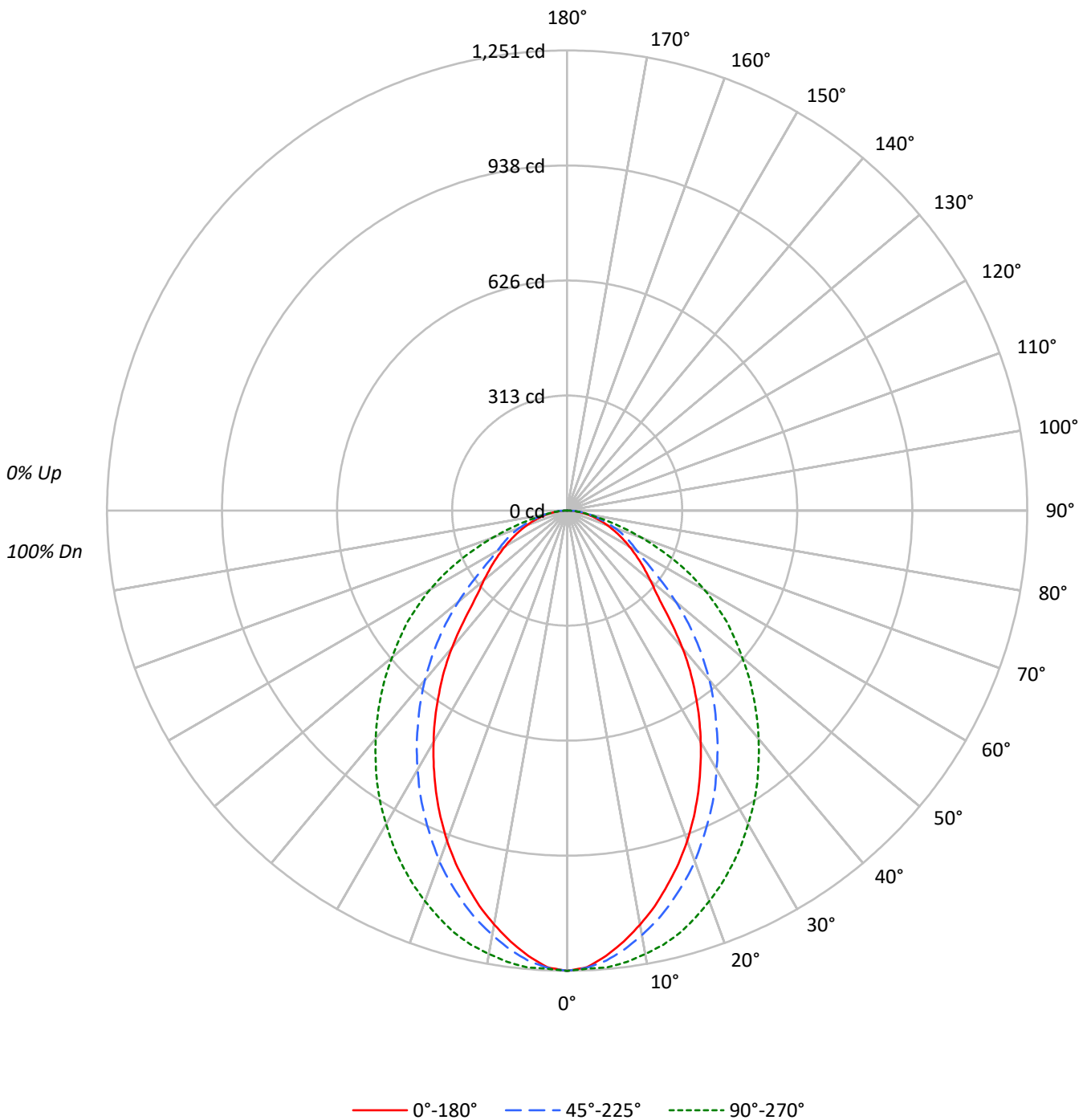
Lumens per Lamp: N/A  
Luminaire Lumens: 2346.0 lumens  
Efficiency: N/A  
Efficacy: 67.0 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

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°	8616	8616	8616
5°	8399	8485	8615
10°	7988	8190	8557
15°	7512	7842	8466
20°	6998	7438	8280
25°	6411	6962	8073
30°	5774	6460	7822
35°	5107	5937	7577
40°	4383	5405	7281
45°	3578	4808	6975
50°	3174	4124	6655
55°	2911	3421	6378
60°	2685	3030	5939
65°	2506	2913	5295
70°	2341	2768	4328
75°	2163	2594	3192
80°	2034	2431	2331
85°	1880	2370	1975

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6975 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.8	4.9
10°-20°	311.9	13.3
20°-30°	428.7	18.3
30°-40°	454.4	19.4
40°-50°	396.6	16.9
50°-60°	301.3	12.8
60°-70°	201.9	8.6
70°-80°	104.1	4.4
80°-90°	31.2	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°	856.5	36.5
0°-40°	1310.8	55.9
0°-60°	2008.8	85.6
0°-90°	2346.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2346.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1251	1251	1251	1251	1251	
5°	1215	1228	1228	1236	1246	114
15°	1054	1074	1100	1149	1188	296
25°	844	870	916	993	1063	387
35°	608	643	706	806	901	379
45°	368	404	494	611	716	290
55°	242	250	285	419	531	217
65°	154	158	179	239	325	153
75°	81	86	98	104	120	87
85°	24	30	30	28	25	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1251.4	1251.4	1251.4	1251.4	1251.4
2.5°	1242.7	1251.4	1243.9	1243.9	1246.4
5°	1215.2	1227.7	1227.7	1236.4	1246.4
7.5°	1181.4	1195.2	1202.7	1222.7	1237.7
10°	1142.6	1157.6	1171.4	1201.4	1223.9
12.5°	1101.4	1117.6	1138.9	1177.7	1208.9
15°	1053.9	1073.9	1100.1	1148.9	1187.7
17.5°	1006.4	1026.4	1058.9	1116.4	1160.1
20°	955.1	976.4	1015.1	1077.6	1130.1
22.5°	900.1	923.9	965.1	1036.4	1097.6
25°	843.9	870.1	916.4	992.6	1062.6
27.5°	785.1	816.4	866.4	947.6	1025.1
30°	726.3	757.6	812.6	901.4	983.9
32.5°	667.6	701.3	761.3	855.1	943.9
35°	607.6	642.6	706.3	806.4	901.4
37.5°	548.8	583.8	655.1	758.8	855.1
40°	487.6	523.8	601.3	710.1	810.1
42.5°	425.1	463.8	547.6	660.1	763.8
45°	367.5	403.8	493.8	611.3	716.3
47.5°	325.0	348.8	440.1	561.3	670.1
50°	296.3	308.8	385.0	512.6	621.3
52.5°	267.5	277.5	333.8	462.6	575.1
55°	242.5	250.0	285.0	418.8	531.3
57.5°	217.5	225.0	247.5	375.0	480.1
60°	195.0	201.3	220.0	328.8	431.3
62.5°	173.8	178.8	198.8	285.0	378.8
65°	153.8	157.5	178.8	238.8	325.0
67.5°	133.8	137.5	158.8	195.0	267.5
70°	116.3	117.5	137.5	158.8	215.0
72.5°	98.8	100.0	116.3	128.8	165.0
75°	81.3	86.3	97.5	103.8	120.0
77.5°	66.3	72.5	78.8	81.3	81.3
80°	51.3	58.8	61.3	61.3	58.8
82.5°	37.5	43.8	45.0	42.5	40.0
85°	23.8	30.0	30.0	27.5	25.0
87.5°	11.3	16.3	16.3	15.0	11.3
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	14.09	15.59	14.45	15.90	16.21	18.02	19.51	18.38	19.83	20.14
	3H	15.66	17.00	16.04	17.33	17.69	19.44	20.78	19.82	21.11	21.47
	4H	16.27	17.53	16.67	17.88	18.26	19.85	21.11	20.25	21.46	21.84
	6H	16.77	17.93	17.18	18.30	18.69	20.07	21.23	20.48	21.60	21.99
	8H	16.94	18.05	17.37	18.44	18.84	20.13	21.24	20.56	21.63	22.03
	12H	17.07	18.13	17.50	18.51	18.94	20.16	21.22	20.59	21.60	22.03
4H	2H	14.83	16.09	15.23	16.43	16.81	18.14	19.40	18.54	19.75	20.13
	3H	16.61	17.65	17.02	18.05	18.45	19.75	20.80	20.16	21.20	21.60
	4H	17.34	18.28	17.77	18.70	19.14	20.28	21.22	20.71	21.64	22.08
	6H	17.98	18.80	18.44	19.24	19.70	20.62	21.44	21.08	21.88	22.34
	8H	18.21	18.97	18.67	19.42	19.88	20.72	21.49	21.19	21.93	22.40
	12H	18.38	19.06	18.86	19.54	20.01	20.79	21.48	21.28	21.96	22.43
8H	4H	17.74	18.51	18.21	18.95	19.42	20.39	21.15	20.85	21.60	22.06
	6H	18.53	19.16	19.03	19.65	20.13	20.83	21.46	21.32	21.95	22.43
	8H	18.85	19.42	19.37	19.93	20.42	20.98	21.55	21.50	22.06	22.55
	12H	19.13	19.63	19.64	20.12	20.69	21.12	21.62	21.63	22.11	22.68
12H	4H	17.79	18.47	18.27	18.95	19.42	20.39	21.07	20.87	21.55	22.02
	6H	18.61	19.18	19.13	19.69	20.18	20.84	21.41	21.36	21.92	22.41
	8H	19.01	19.51	19.52	20.00	20.57	21.05	21.55	21.56	22.04	22.61