

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: P1061450

Luminaire Tested: S125RDRP-S1090D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061450  
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-S1090D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

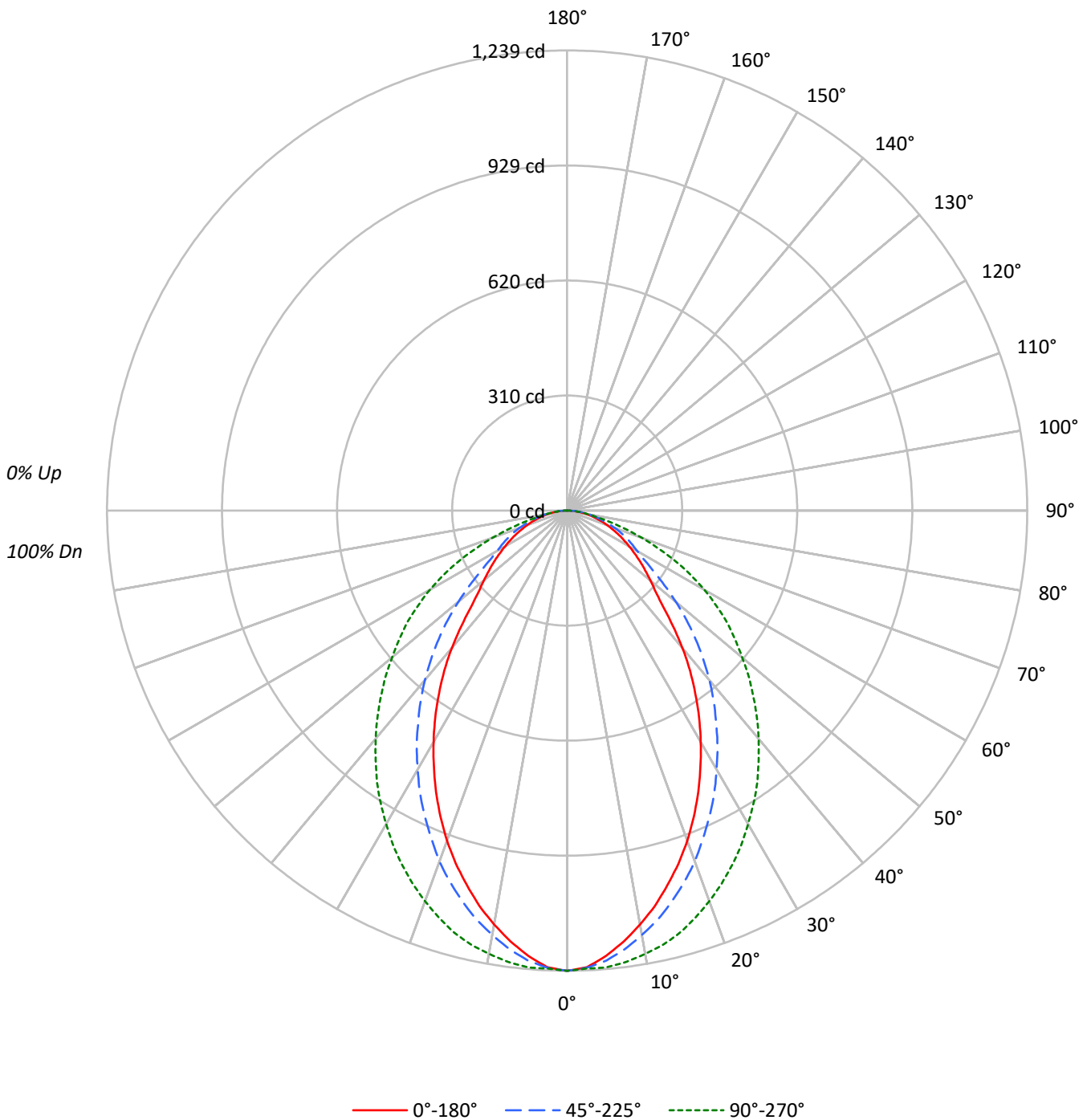
Lumens per Lamp: N/A  
Luminaire Lumens: 2323.1 lumens  
Efficiency: N/A  
Efficacy: 66.4 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

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	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°	8532	8532	8532
5°	8317	8402	8530
10°	7911	8110	8473
15°	7439	7765	8383
20°	6930	7365	8200
25°	6348	6894	7994
30°	5718	6398	7746
35°	5057	5879	7503
40°	4339	5352	7210
45°	3544	4761	6907
50°	3143	4084	6591
55°	2883	3389	6315
60°	2659	3001	5881
65°	2481	2884	5244
70°	2317	2742	4286
75°	2142	2570	3160
80°	2014	2407	2308
85°	1856	2346	1959

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6907 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.7	4.9
10°-20°	308.9	13.3
20°-30°	424.5	18.3
30°-40°	449.9	19.4
40°-50°	392.8	16.9
50°-60°	298.4	12.8
60°-70°	199.9	8.6
70°-80°	103.1	4.4
80°-90°	30.9	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°	848.1	36.5
0°-40°	1298.0	55.9
0°-60°	1989.2	85.6
0°-90°	2323.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2323.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1239	1239	1239	1239	1239	
5°	1203	1216	1216	1224	1234	113
15°	1044	1063	1089	1138	1176	293
25°	836	862	907	983	1052	383
35°	602	636	699	798	893	375
45°	364	400	489	605	709	287
55°	240	248	282	415	526	215
65°	152	156	177	236	322	151
75°	80	85	97	103	119	86
85°	24	30	30	27	25	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1239.2	1239.2	1239.2	1239.2	1239.2
2.5°	1230.5	1239.2	1231.8	1231.8	1234.2
5°	1203.3	1215.7	1215.7	1224.3	1234.2
7.5°	1169.9	1183.5	1190.9	1210.7	1225.6
10°	1131.5	1146.3	1160.0	1189.7	1211.9
12.5°	1090.6	1106.7	1127.8	1166.1	1197.1
15°	1043.6	1063.4	1089.4	1137.7	1176.0
17.5°	996.5	1016.4	1048.5	1105.5	1148.8
20°	945.8	966.8	1005.2	1067.1	1119.1
22.5°	891.3	914.8	955.7	1026.3	1086.9
25°	835.6	861.6	907.4	982.9	1052.3
27.5°	777.4	808.4	857.9	938.4	1015.1
30°	719.2	750.2	804.7	892.6	974.3
32.5°	661.1	694.5	753.9	846.8	934.6
35°	601.6	636.3	699.4	798.5	892.6
37.5°	543.5	578.1	648.7	751.4	846.8
40°	482.8	518.7	595.5	703.2	802.2
42.5°	420.9	459.3	542.2	653.6	756.4
45°	364.0	399.9	489.0	605.4	709.3
47.5°	321.9	345.4	435.8	555.8	663.5
50°	293.4	305.8	381.3	507.6	615.3
52.5°	264.9	274.8	330.5	458.0	569.5
55°	240.2	247.6	282.3	414.7	526.1
57.5°	215.4	222.8	245.1	371.4	475.4
60°	193.1	199.3	217.9	325.6	427.1
62.5°	172.1	177.0	196.8	282.3	375.1
65°	152.3	156.0	177.0	236.4	321.9
67.5°	132.5	136.2	157.2	193.1	264.9
70°	115.1	116.4	136.2	157.2	212.9
72.5°	97.8	99.0	115.1	127.5	163.4
75°	80.5	85.4	96.6	102.7	118.8
77.5°	65.6	71.8	78.0	80.5	80.5
80°	50.8	58.2	60.7	60.7	58.2
82.5°	37.1	43.3	44.6	42.1	39.6
85°	23.5	29.7	29.7	27.2	24.8
87.5°	11.1	16.1	16.1	14.9	11.1
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	14.05	15.55	14.42	15.86	16.18	17.98	19.48	18.35	19.79	20.11
	3H	15.63	16.97	16.00	17.30	17.66	19.40	20.75	19.78	21.08	21.44
	4H	16.24	17.50	16.64	17.85	18.23	19.82	21.08	20.22	21.43	21.81
	6H	16.73	17.90	17.15	18.26	18.66	20.04	21.20	20.45	21.57	21.96
	8H	16.91	18.02	17.34	18.41	18.81	20.09	21.20	20.52	21.59	21.99
	12H	17.03	18.09	17.46	18.47	18.90	20.13	21.19	20.56	21.57	22.00
4H	2H	14.79	16.05	15.19	16.40	16.78	18.11	19.37	18.51	19.72	20.10
	3H	16.57	17.62	16.98	18.02	18.42	19.72	20.76	20.13	21.16	21.56
	4H	17.31	18.25	17.74	18.66	19.10	20.25	21.19	20.68	21.60	22.04
	6H	17.94	18.76	18.40	19.20	19.66	20.59	21.41	21.05	21.85	22.31
	8H	18.17	18.94	18.63	19.38	19.85	20.69	21.45	21.15	21.90	22.36
	12H	18.34	19.03	18.83	19.51	19.98	20.76	21.44	21.24	21.92	22.39
8H	4H	17.71	18.47	18.17	18.92	19.38	20.35	21.12	20.82	21.56	22.03
	6H	18.49	19.13	18.99	19.62	20.10	20.79	21.42	21.29	21.91	22.39
	8H	18.82	19.38	19.33	19.89	20.38	20.95	21.52	21.46	22.03	22.52
	12H	19.09	19.59	19.60	20.09	20.65	21.09	21.59	21.60	22.08	22.64
12H	4H	17.75	18.43	18.23	18.91	19.38	20.35	21.03	20.83	21.51	21.99
	6H	18.58	19.14	19.09	19.66	20.14	20.81	21.38	21.32	21.89	22.37
	8H	18.97	19.47	19.48	19.97	20.53	21.02	21.52	21.53	22.01	22.58