

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: P1061498

Luminaire Tested: S125RDRP-S1090D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061498  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S1090D940-X4F0-XX-UDD-BVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

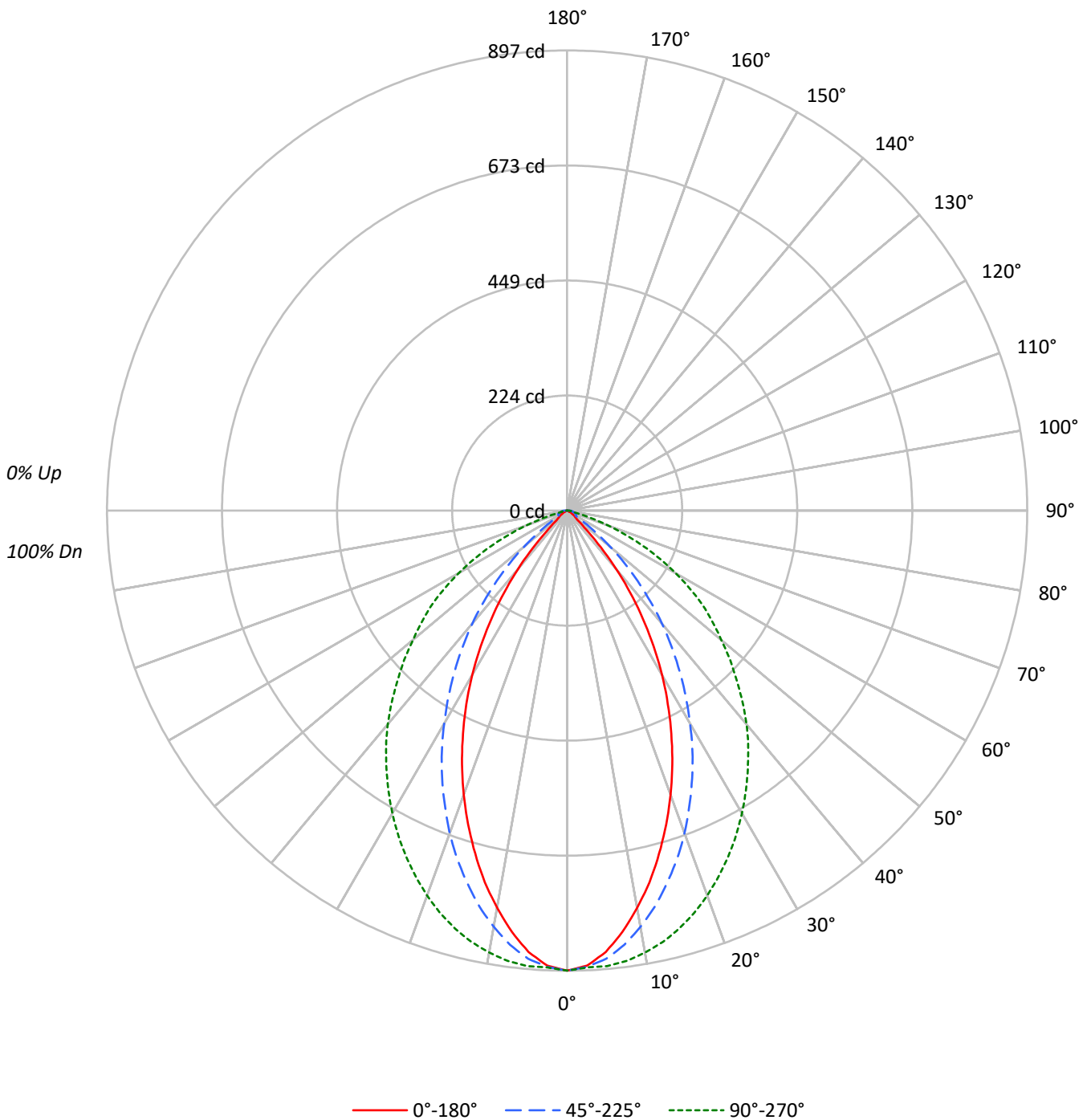
Lumens per Lamp: N/A  
Luminaire Lumens: 1153.3 lumens  
Efficiency: N/A  
Efficacy: 33.0 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

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	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	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	68	74	70	67	65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39

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

	0°	45°	90°
0°	6174	6174	6174
5°	5969	6060	6160
10°	5497	5760	6115
15°	4936	5360	6014
20°	4321	4903	5850
25°	3650	4380	5646
30°	2942	3811	5417
35°	2163	3212	5161
40°	1350	2590	4893
45°	505	1893	4548
50°	237	1183	4199
55°	173	491	3885
60°	121	259	3361
65°	72	306	2662
70°	66	356	1689
75°	88	354	529
80°	131	436	393
85°	261	695	521

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4548 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.2	7.1
10°-20°	212.9	18.5
20°-30°	271.2	23.5
30°-40°	252.4	21.9
40°-50°	172.9	15.0
50°-60°	95.2	8.3
60°-70°	45.1	3.9
70°-80°	14.2	1.2
80°-90°	7.2	0.6
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°	566.3	49.1
0°-40°	818.7	71.0
0°-60°	1086.9	94.2
0°-90°	1153.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1153.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	864	875	877	884	891	80
15°	692	714	752	808	844	193
25°	480	510	576	669	743	219
35°	257	294	382	508	614	160
45°	52	87	194	345	467	49
55°	14	17	41	192	324	13
65°	4	6	19	71	163	5
75°	3	6	13	14	20	3
85°	3	8	9	8	7	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	896.7	896.7	896.7	896.7	896.7
2.5°	887.9	896.7	890.1	890.1	891.2
5°	863.6	874.6	876.8	883.5	891.2
7.5°	828.2	842.6	853.6	872.4	885.7
10°	786.3	804.0	823.8	854.8	874.6
12.5°	742.1	760.9	790.7	833.8	861.4
15°	692.4	714.5	752.0	808.4	843.7
17.5°	641.6	665.9	712.3	778.6	822.7
20°	589.7	615.1	669.2	743.2	798.4
22.5°	535.6	563.2	622.8	706.8	771.9
25°	480.4	510.2	576.5	669.2	743.2
27.5°	425.2	456.1	529.0	630.6	713.4
30°	370.0	402.0	479.3	590.8	681.4
32.5°	313.6	349.0	430.7	551.1	648.2
35°	257.3	293.8	382.1	508.0	614.0
37.5°	202.1	239.6	334.6	467.1	579.8
40°	150.2	187.7	288.2	426.3	544.4
42.5°	97.2	136.9	239.6	384.3	505.8
45°	51.9	87.2	194.4	344.6	467.1
47.5°	27.6	46.4	151.3	304.8	430.7
50°	22.1	25.4	110.4	265.0	392.0
52.5°	17.7	19.9	70.7	224.2	357.8
55°	14.4	16.6	40.9	192.2	323.6
57.5°	11.0	13.3	23.2	160.1	283.8
60°	8.8	9.9	18.8	128.1	244.1
62.5°	5.5	7.7	18.8	99.4	204.3
65°	4.4	5.5	18.8	70.7	163.4
67.5°	4.4	4.4	18.8	46.4	122.6
70°	3.3	3.3	17.7	29.8	83.9
72.5°	3.3	3.3	15.5	19.9	48.6
75°	3.3	5.5	13.3	14.4	19.9
77.5°	3.3	8.8	12.1	12.1	11.0
80°	3.3	8.8	11.0	9.9	9.9
82.5°	3.3	8.8	8.8	8.8	7.7
85°	3.3	7.7	8.8	7.7	6.6
87.5°	3.3	7.7	7.7	7.7	4.4
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	15.37	16.65	15.73	16.97	17.28
	3H	0.00	0.00	0.00	0.00	0.00	16.16	17.29	16.54	17.62	17.99
	4H	0.00	0.00	0.00	0.00	0.00	16.18	17.24	16.59	17.59	17.98
	6H	0.00	0.02	0.00	0.39	0.79	16.14	17.11	16.55	17.48	17.87
	8H	0.00	0.64	0.16	1.04	1.44	16.12	17.03	16.55	17.43	17.83
	12H	0.47	1.35	0.90	1.73	2.16	16.10	16.97	16.53	17.36	17.79
4H	2H	0.00	0.22	0.00	0.57	0.96	15.15	16.21	15.56	16.56	16.94
	3H	0.03	0.89	0.44	1.30	1.70	15.98	16.84	16.39	17.25	17.65
	4H	0.62	1.39	1.06	1.81	2.26	16.02	16.79	16.45	17.21	17.65
	6H	2.11	2.77	2.57	3.22	3.69	16.00	16.67	16.47	17.11	17.58
	8H	2.85	3.47	3.32	3.91	4.38	15.99	16.60	16.46	17.05	17.52
	12H	3.59	4.13	4.07	4.62	5.09	15.99	16.53	16.47	17.02	17.49
8H	4H	2.66	3.28	3.13	3.73	4.20	15.90	16.52	16.37	16.97	17.44
	6H	4.40	4.90	4.90	5.40	5.88	15.90	16.41	16.40	16.90	17.39
	8H	5.34	5.80	5.87	6.31	6.81	15.91	16.36	16.43	16.88	17.37
	12H	6.27	6.68	6.79	7.17	7.74	15.95	16.35	16.47	16.85	17.42
12H	4H	2.96	3.51	3.45	3.99	4.46	15.86	16.41	16.35	16.89	17.36
	6H	4.85	5.30	5.37	5.82	6.31	15.86	16.31	16.38	16.83	17.32
	8H	5.98	6.38	6.49	6.88	7.45	15.90	16.30	16.41	16.79	17.36