

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: P1061452

Luminaire Tested: S125RDRP-S1090D840-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061452  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S1090D840-X4F0-XX-UDD-BVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

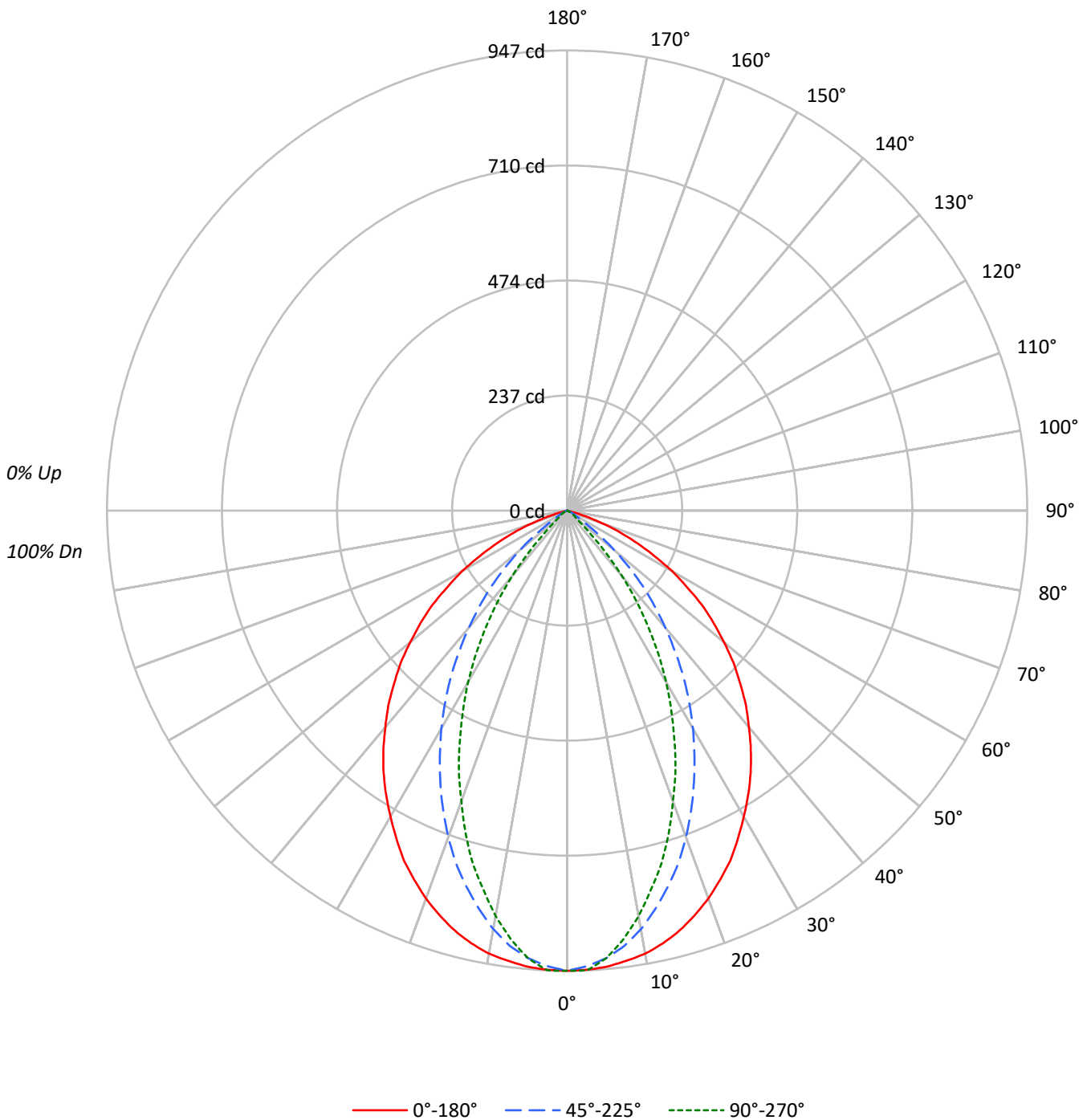
Lumens per Lamp: N/A  
Luminaire Lumens: 1223.5 lumens  
Efficiency: N/A  
Efficacy: 35.0 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

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	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	53	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	6521	6521	6521
5°	6511	6390	6390
10°	6473	6115	5923
15°	6378	5709	5353
20°	6226	5237	4660
25°	6037	4690	3968
30°	5782	4113	3238
35°	5535	3508	2426
40°	5234	2830	1572
45°	4904	2141	682
50°	4511	1366	254
55°	4065	600	180
60°	3441	258	120
65°	2605	163	60
70°	1584	74	24
75°	333	32	32
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4904 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.3	7.1
10°-20°	227.6	18.6
20°-30°	292.2	23.9
30°-40°	275.1	22.5
40°-50°	192.3	15.7
50°-60°	102.7	8.4
60°-70°	41.0	3.3
70°-80°	5.3	0.4
80°-90°	0.0	0.0
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°	607.1	49.6
0°-40°	882.2	72.1
0°-60°	1177.3	96.2
0°-90°	1223.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1223.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	947	947	947	947	947	
5°	942	940	925	927	925	89
15°	895	866	801	764	751	252
25°	795	725	617	550	522	365
35°	658	554	417	322	289	411
45°	504	377	220	106	70	388
55°	339	207	50	18	15	300
65°	160	64	10	5	4	159
75°	12	4	1	1	1	24
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	947.1	947.1	947.1	947.1	947.1
2.5°	945.9	947.1	938.4	945.9	947.1
5°	942.1	939.6	924.6	927.1	924.6
7.5°	934.6	928.4	903.4	894.7	889.7
10°	925.9	912.1	874.7	855.9	847.2
12.5°	912.1	892.2	839.7	810.9	798.4
15°	894.7	865.9	800.9	763.5	751.0
17.5°	873.4	835.9	761.0	714.7	696.0
20°	849.7	799.7	714.7	659.7	636.0
22.5°	822.2	764.7	667.2	606.0	582.3
25°	794.7	724.7	617.3	549.8	522.3
27.5°	761.0	683.5	567.3	494.8	464.8
30°	727.2	642.3	517.3	438.6	407.3
32.5°	693.5	598.5	467.3	379.9	348.6
35°	658.5	553.5	417.3	322.4	288.6
37.5°	621.0	508.6	363.6	267.4	232.4
40°	582.3	464.8	314.9	213.7	174.9
42.5°	544.8	421.1	266.1	161.2	118.7
45°	503.6	377.4	219.9	106.2	70.0
47.5°	464.8	334.9	172.4	61.2	36.2
50°	421.1	291.1	127.5	32.5	23.7
52.5°	379.9	248.7	85.0	21.2	18.7
55°	338.6	207.4	50.0	17.5	15.0
57.5°	291.1	167.4	27.5	13.7	11.2
60°	249.9	131.2	18.7	10.0	8.7
62.5°	202.4	96.2	13.7	7.5	6.2
65°	159.9	63.7	10.0	5.0	3.7
67.5°	118.7	37.5	6.2	2.5	2.5
70°	78.7	20.0	3.7	1.2	1.2
72.5°	41.2	8.7	2.5	1.2	1.2
75°	12.5	3.7	1.2	1.2	1.2
77.5°	0.0	1.2	0.0	0.0	1.2
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	15.46	16.72	15.82	17.03	17.35	0.00	0.00	0.00	0.00	0.00
	3H	16.04	17.15	16.42	17.48	17.85	0.00	0.00	0.00	0.00	0.00
	4H	16.01	17.04	16.41	17.39	17.77	0.00	0.00	0.00	0.00	0.00
	6H	15.92	16.87	16.34	17.24	17.63	0.00	0.00	0.00	0.00	0.00
	8H	15.87	16.77	16.31	17.16	17.56	0.00	0.00	0.00	0.00	0.00
	12H	15.83	16.68	16.26	17.06	17.49	0.00	0.00	0.00	0.00	0.00
4H	2H	15.23	16.26	15.63	16.61	17.00	0.00	0.00	0.00	0.00	0.00
	3H	15.82	16.66	16.24	17.06	17.47	0.00	0.00	0.00	0.00	0.00
	4H	15.77	16.51	16.21	16.93	17.38	0.00	0.00	0.00	0.00	0.00
	6H	15.69	16.32	16.15	16.77	17.24	0.00	0.00	0.00	0.00	0.00
	8H	15.62	16.22	16.10	16.67	17.14	0.00	0.00	0.00	0.00	0.00
	12H	15.57	16.10	16.06	16.58	17.06	0.00	0.00	0.00	0.00	0.00
8H	4H	15.63	16.22	16.10	16.67	17.14	0.00	0.00	0.00	0.00	0.00
	6H	15.52	16.00	16.02	16.50	16.98	0.00	0.00	0.00	0.00	0.00
	8H	15.45	15.88	15.98	16.40	16.89	0.00	0.00	0.00	0.00	0.00
	12H	15.40	15.78	15.92	16.28	16.85	0.00	0.00	0.00	0.00	0.00
12H	4H	15.57	16.10	16.06	16.58	17.06	0.00	0.00	0.00	0.00	0.00
	6H	15.45	15.88	15.98	16.40	16.89	0.00	0.00	0.00	0.00	0.00
	8H	15.40	15.78	15.92	16.28	16.85	0.00	0.00	0.00	0.00	0.00