

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: P1056377

Luminaire Tested: S125R3DRP-S1090D935-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056377  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DRP-S1090D935-X4F0-XX-UDD-F-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

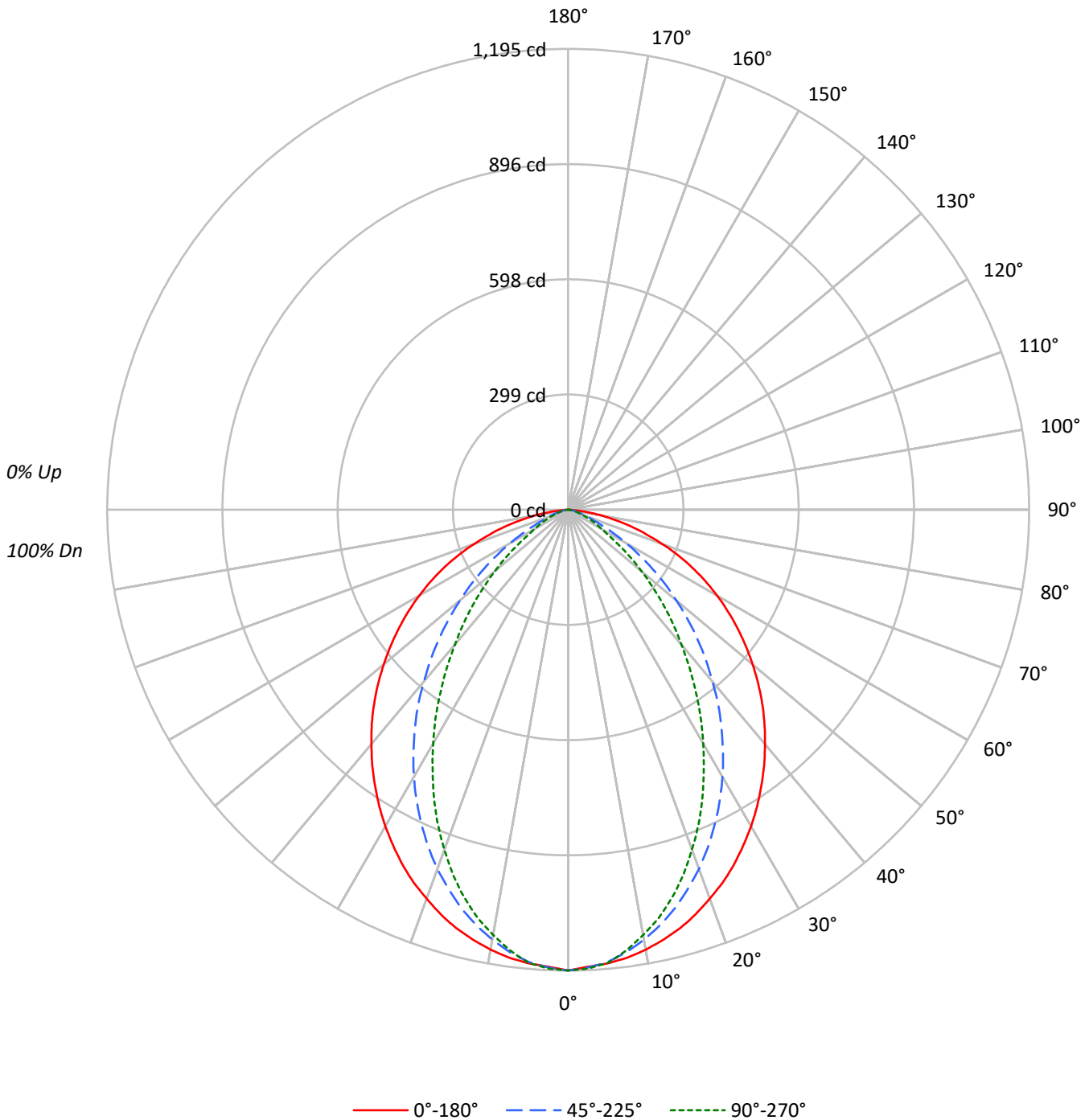
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2159.7 lumens  
Efficiency: N/A  
Efficacy: 62.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 34.7  
Input Voltage (V): 120  
Input Current (Ain): 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

TEST NUMBER: P1056377

CATALOG NUMBER: S125R3DRP-S1090D935-X4F0-XX-UDD-F-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1056377

CATALOG NUMBER: S125R3DRP-S1090D935-X4F0-XX-UDD-F-S

**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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

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

	0°	45°	90°
0°	8448	8448	8448
5°	8378	8354	8370
10°	8315	8125	8038
15°	8219	7830	7620
20°	8074	7458	7059
25°	7923	7016	6421
30°	7740	6530	5717
35°	7534	5977	4975
40°	7321	5371	4207
45°	7112	4735	3484
50°	6863	4027	2737
55°	6600	3272	1990
60°	6304	2440	1424
65°	5923	1611	1111
70°	5351	1120	777
75°	4654	727	604
80°	3648	541	497
85°	1882	446	357

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7112 cd/sqm



TEST NUMBER: P1056377

CATALOG NUMBER: S125R3DRP-S1090D935-X4F0-XX-UDD-F-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.3	5.2
10°-20°	302.6	14.0
20°-30°	418.4	19.4
30°-40°	443.3	20.5
40°-50°	386.9	17.9
50°-60°	275.2	12.7
60°-70°	153.0	7.1
70°-80°	58.8	2.7
80°-90°	10.2	0.5
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°	832.3	38.5
0°-40°	1275.6	59.1
0°-60°	1937.7	89.7
0°-90°	2159.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2159.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1195	1195	1195	1195	1195	
5°	1181	1189	1177	1174	1180	112
15°	1123	1113	1070	1047	1041	316
25°	1016	981	900	844	823	468
35°	873	813	693	608	576	546
45°	711	626	474	378	348	548
55°	536	429	266	184	162	479
65°	354	232	96	71	66	350
75°	170	66	27	22	22	181
85°	23	7	6	4	4	34
90°	0	0	0	0	0	



TEST NUMBER: P1056377

CATALOG NUMBER: S125R3DRP-S1090D935-X4F0-XX-UDD-F-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1195.0	1195.0	1195.0	1195.0	1195.0
2.5°	1186.1	1198.3	1188.3	1189.4	1190.5
5°	1180.6	1189.4	1177.2	1173.9	1179.5
7.5°	1171.7	1178.4	1157.3	1149.6	1152.9
10°	1158.4	1160.7	1131.9	1120.8	1119.7
12.5°	1141.8	1138.5	1103.1	1085.4	1084.3
15°	1123.0	1113.1	1069.9	1046.7	1041.2
17.5°	1099.8	1084.3	1031.2	1001.3	992.5
20°	1073.2	1052.2	991.4	952.6	938.3
22.5°	1046.7	1017.9	947.1	898.4	882.9
25°	1015.7	981.4	899.5	844.2	823.2
27.5°	982.5	941.6	850.9	786.7	761.2
30°	948.2	900.6	800.0	728.0	700.4
32.5°	911.7	857.5	746.8	668.3	639.5
35°	873.0	813.2	692.6	608.5	576.5
37.5°	834.3	767.9	639.5	549.9	516.7
40°	793.3	721.4	582.0	490.2	455.9
42.5°	753.5	673.8	527.8	433.7	402.7
45°	711.4	626.2	473.6	378.4	348.5
47.5°	668.3	576.5	419.3	326.4	296.5
50°	624.0	527.8	366.2	275.5	248.9
52.5°	579.8	479.1	316.4	226.8	203.6
55°	535.5	429.3	265.5	183.7	161.5
57.5°	491.3	380.6	218.0	143.8	123.9
60°	445.9	330.8	172.6	106.2	100.7
62.5°	400.5	282.1	133.9	87.4	83.0
65°	354.1	232.4	96.3	70.8	66.4
67.5°	307.6	187.0	69.7	54.2	50.9
70°	258.9	142.7	54.2	40.9	37.6
72.5°	212.4	102.9	38.7	29.9	28.8
75°	170.4	66.4	26.6	22.1	22.1
77.5°	128.3	39.8	18.8	16.6	16.6
80°	89.6	23.2	13.3	12.2	12.2
82.5°	54.2	12.2	8.9	7.7	7.7
85°	23.2	6.6	5.5	4.4	4.4
87.5°	4.4	2.2	2.2	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1056377

CATALOG NUMBER: S125R3DRP-S1090D935-X4F0-XX-UDD-F-S

**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	18.58	20.02	18.94	20.33	20.65	11.21	12.66	11.58	12.97	13.28
	3H	20.13	21.42	20.51	21.75	22.11	11.78	13.06	12.15	13.39	13.75
	4H	20.66	21.86	21.06	22.21	22.59	11.90	13.10	12.30	13.45	13.83
	6H	20.99	22.10	21.41	22.47	22.86	11.96	13.07	12.38	13.44	13.83
	8H	21.08	22.13	21.50	22.52	22.92	11.97	13.02	12.40	13.41	13.81
	12H	21.10	22.10	21.53	22.49	22.92	11.96	12.96	12.39	13.35	13.78
4H	2H	18.47	19.67	18.87	20.02	20.40	11.78	12.98	12.18	13.33	13.71
	3H	20.14	21.13	20.55	21.53	21.93	12.45	13.44	12.86	13.84	14.24
	4H	20.69	21.57	21.12	21.99	22.43	12.61	13.49	13.04	13.91	14.35
	6H	21.08	21.84	21.54	22.29	22.75	12.72	13.48	13.18	13.93	14.39
	8H	21.18	21.90	21.65	22.34	22.81	12.73	13.44	13.20	13.89	14.36
	12H	21.23	21.86	21.72	22.35	22.82	12.73	13.36	13.22	13.85	14.32
8H	4H	20.59	21.30	21.06	21.75	22.22	12.88	13.59	13.34	14.03	14.50
	6H	20.98	21.56	21.48	22.06	22.54	13.01	13.60	13.51	14.09	14.57
	8H	21.08	21.61	21.60	22.12	22.61	13.04	13.56	13.56	14.08	14.57
	12H	21.15	21.61	21.66	22.11	22.67	13.06	13.52	13.57	14.02	14.58
12H	4H	20.55	21.19	21.04	21.67	22.14	12.89	13.52	13.38	14.01	14.48
	6H	20.92	21.45	21.44	21.96	22.45	13.02	13.55	13.54	14.06	14.55
	8H	21.05	21.52	21.56	22.01	22.58	13.08	13.54	13.59	14.04	14.61