

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: P1056382

Luminaire Tested: S125R3DR-S1090D950-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056382  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DR-S1090D950-X4F0-XX-UDD-F-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

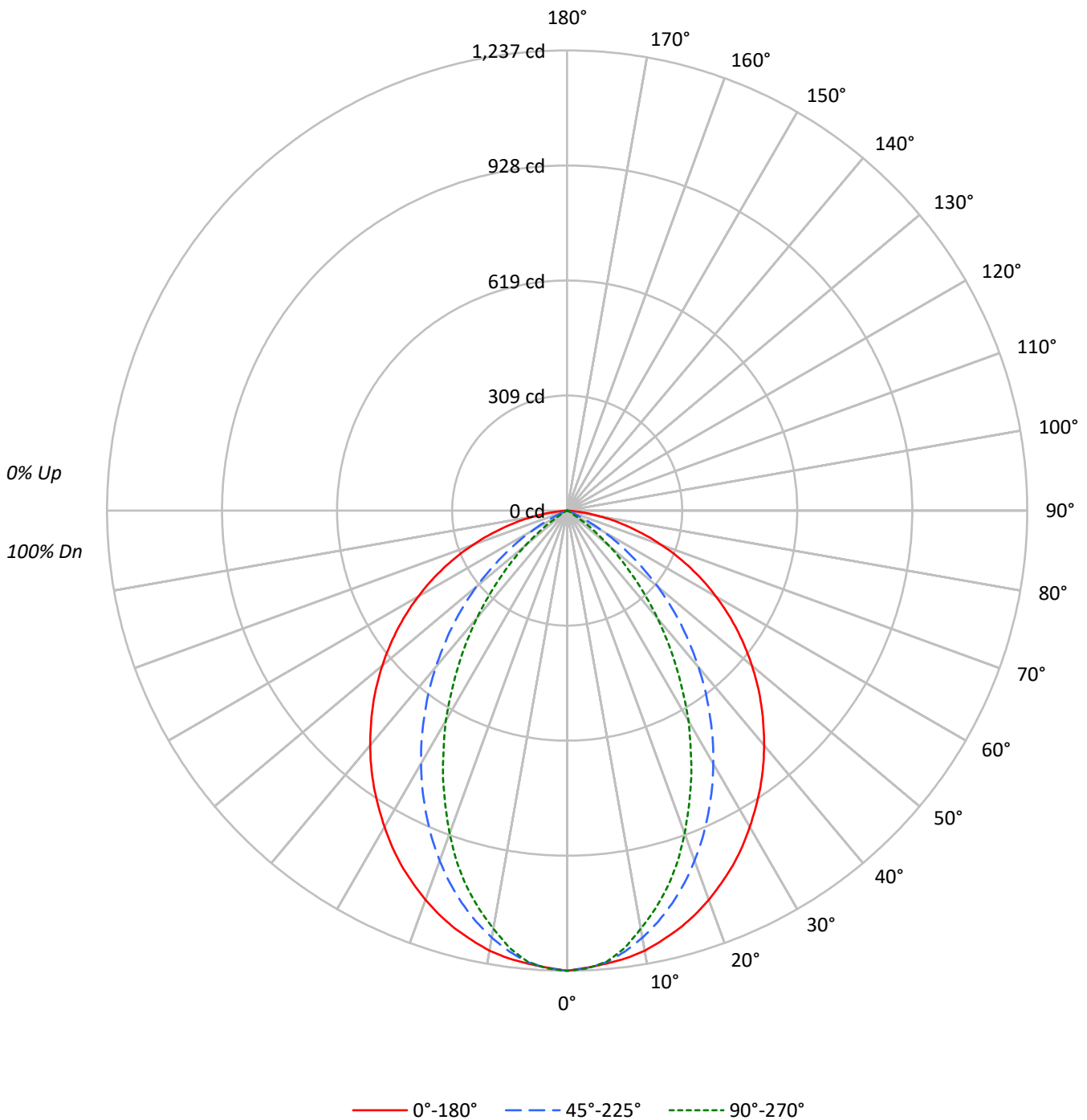
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2004.9 lumens  
Efficiency: N/A  
Efficacy: 57.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07  
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 (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	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

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

	0°	45°	90°
0°	8745	8745	8745
5°	8674	8648	8639
10°	8624	8369	8193
15°	8515	7994	7653
20°	8375	7535	6945
25°	8214	7000	6158
30°	8016	6414	5324
35°	7819	5766	4401
40°	7602	5068	3485
45°	7378	4327	2524
50°	7132	3492	1631
55°	6860	2554	725
60°	6535	1578	208
65°	6132	574	124
70°	5550	203	52
75°	4821	68	33
80°	3692	49	0
85°	1687	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7378 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.9	5.7
10°-20°	308.5	15.4
20°-30°	417.4	20.8
30°-40°	428.7	21.4
40°-50°	355.2	17.7
50°-60°	228.0	11.4
60°-70°	110.2	5.5
70°-80°	37.3	1.9
80°-90°	4.8	0.2
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°	840.8	41.9
0°-40°	1269.5	63.3
0°-60°	1852.7	92.4
0°-90°	2004.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2004.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1237	1237	1237	1237	1237	
5°	1222	1232	1219	1211	1217	116
15°	1163	1149	1092	1054	1046	328
25°	1053	1002	897	816	790	485
35°	906	819	668	552	510	566
45°	738	617	433	299	252	569
55°	557	408	207	91	59	497
65°	367	202	34	10	7	363
75°	176	38	2	1	1	187
85°	21	0	0	0	0	33
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1237.0	1237.0	1237.0	1237.0	1237.0
2.5°	1229.6	1239.4	1230.9	1229.6	1232.1
5°	1222.3	1232.1	1218.6	1211.2	1217.4
7.5°	1213.7	1218.6	1195.3	1183.0	1185.5
10°	1201.4	1200.2	1165.9	1145.0	1141.4
12.5°	1183.0	1176.9	1131.6	1102.1	1096.0
15°	1163.4	1148.7	1092.3	1054.3	1045.7
17.5°	1140.1	1116.8	1049.4	1000.4	988.1
20°	1113.2	1081.3	1001.6	941.5	923.1
22.5°	1083.7	1043.3	951.3	880.2	855.7
25°	1053.1	1001.6	897.4	816.5	789.5
27.5°	1018.8	958.7	843.5	751.5	718.4
30°	982.0	913.3	785.8	685.3	652.2
32.5°	944.0	868.0	728.2	619.1	578.7
35°	906.0	818.9	668.1	551.7	510.0
37.5°	865.5	769.9	609.3	487.9	442.6
40°	823.8	719.6	549.2	421.7	377.6
42.5°	780.9	668.1	489.2	359.2	313.8
45°	738.0	616.7	432.8	299.1	252.5
47.5°	693.9	563.9	373.9	240.3	199.8
50°	648.5	512.4	317.5	187.6	148.3
52.5°	603.2	459.7	259.9	136.1	100.5
55°	556.6	408.2	207.2	90.7	58.8
57.5°	510.0	355.5	158.1	50.3	22.1
60°	462.2	305.3	111.6	17.2	14.7
62.5°	415.6	251.3	69.9	13.5	11.0
65°	366.6	202.3	34.3	9.8	7.4
67.5°	318.7	155.7	14.7	6.1	3.7
70°	268.5	112.8	9.8	3.7	2.5
72.5°	221.9	72.3	6.1	2.5	1.2
75°	176.5	38.0	2.5	1.2	1.2
77.5°	132.4	15.9	1.2	1.2	1.2
80°	90.7	7.4	1.2	1.2	0.0
82.5°	53.9	2.5	1.2	1.2	0.0
85°	20.8	0.0	0.0	0.0	0.0
87.5°	1.2	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	18.60	19.99	18.97	20.30	20.61	3.47	4.86	3.84	5.17	5.49
	3H	20.15	21.38	20.53	21.71	22.07	3.39	4.62	3.77	4.95	5.32
	4H	20.67	21.82	21.08	22.17	22.55	3.33	4.47	3.73	4.82	5.21
	6H	21.01	22.07	21.43	22.43	22.83	3.26	4.31	3.67	4.68	5.07
	8H	21.10	22.09	21.52	22.48	22.89	3.22	4.21	3.65	4.61	5.01
	12H	21.11	22.06	21.54	22.45	22.88	3.18	4.13	3.61	4.51	4.94
4H	2H	18.41	19.55	18.81	19.90	20.28	4.33	5.48	4.74	5.83	6.21
	3H	20.02	20.95	20.43	21.36	21.76	4.28	5.22	4.70	5.62	6.02
	4H	20.54	21.37	20.98	21.79	22.24	4.21	5.04	4.64	5.46	5.90
	6H	20.92	21.64	21.38	22.08	22.55	4.14	4.86	4.60	5.30	5.77
	8H	21.02	21.69	21.48	22.13	22.60	4.09	4.76	4.56	5.21	5.68
	12H	21.05	21.64	21.54	22.13	22.60	4.05	4.64	4.53	5.12	5.60
8H	4H	20.41	21.08	20.88	21.53	22.00	5.23	5.90	5.69	6.34	6.81
	6H	20.77	21.32	21.27	21.81	22.29	5.14	5.69	5.64	6.19	6.67
	8H	20.86	21.36	21.38	21.87	22.36	5.09	5.58	5.61	6.10	6.59
	12H	20.91	21.34	21.42	21.84	22.41	5.05	5.48	5.56	5.98	6.55
12H	4H	20.37	20.96	20.86	21.45	21.92	5.30	5.90	5.79	6.38	6.85
	6H	20.71	21.20	21.23	21.72	22.21	5.21	5.70	5.73	6.21	6.70
	8H	20.82	21.26	21.34	21.75	22.32	5.17	5.61	5.69	6.10	6.67