

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: P1056563

Luminaire Tested: S125R3DR-H375D930-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056563  
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: S125R3DR-H375D930-X4F0-XX-UDD-F-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

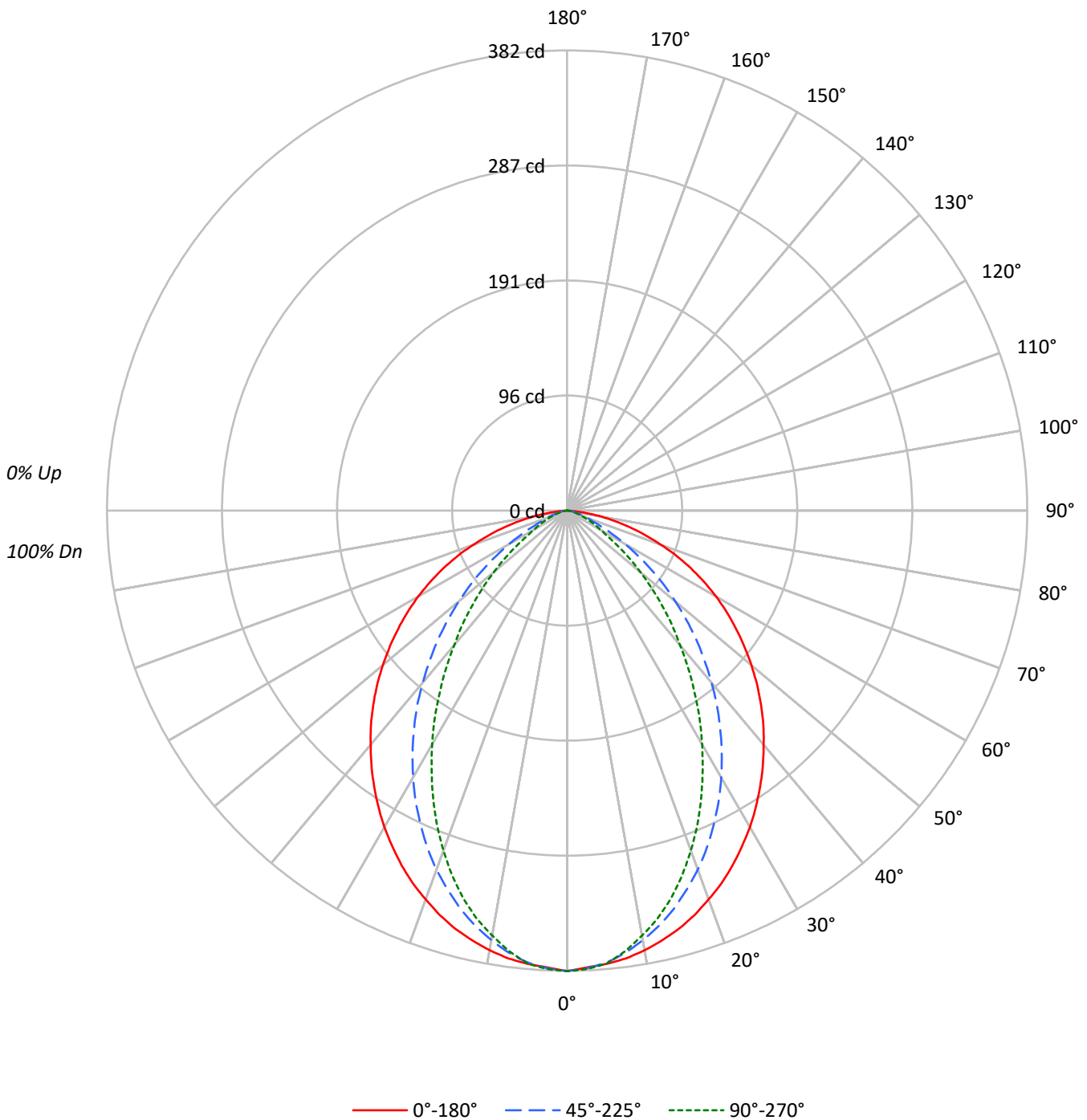
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 691.0 lumens  
Efficiency: N/A  
Efficacy: 59.1 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): 11.7  
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	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°	2703	2703	2703
5°	2680	2673	2678
10°	2660	2599	2571
15°	2630	2505	2438
20°	2583	2386	2258
25°	2535	2245	2055
30°	2477	2089	1829
35°	2410	1912	1591
40°	2342	1718	1345
45°	2275	1515	1115
50°	2196	1289	875
55°	2111	1048	637
60°	2018	780	455
65°	1895	515	355
70°	1711	358	248
75°	1489	232	194
80°	1168	171	159
85°	600	146	114

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2275 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.6	5.2
10°-20°	96.8	14.0
20°-30°	133.9	19.4
30°-40°	141.8	20.5
40°-50°	123.8	17.9
50°-60°	88.0	12.7
60°-70°	49.0	7.1
70°-80°	18.8	2.7
80°-90°	3.3	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°	266.3	38.5
0°-40°	408.1	59.1
0°-60°	620.0	89.7
0°-90°	691.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	691.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	382	382	382	382	382	
5°	378	380	377	376	377	36
15°	359	356	342	335	333	101
25°	325	314	288	270	263	150
35°	279	260	222	195	184	175
45°	228	200	152	121	112	175
55°	171	137	85	59	52	153
65°	113	74	31	23	21	112
75°	54	21	8	7	7	58
85°	7	2	2	1	1	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	382.3	382.3	382.3	382.3	382.3
2.5°	379.5	383.4	380.2	380.5	380.9
5°	377.7	380.5	376.7	375.6	377.4
7.5°	374.9	377.0	370.3	367.8	368.9
10°	370.6	371.3	362.1	358.6	358.2
12.5°	365.3	364.3	352.9	347.3	346.9
15°	359.3	356.1	342.3	334.9	333.1
17.5°	351.9	346.9	329.9	320.4	317.5
20°	343.4	336.7	317.2	304.8	300.2
22.5°	334.9	325.7	303.0	287.4	282.5
25°	325.0	314.0	287.8	270.1	263.4
27.5°	314.3	301.3	272.2	251.7	243.5
30°	303.4	288.2	255.9	232.9	224.1
32.5°	291.7	274.3	238.9	213.8	204.6
35°	279.3	260.2	221.6	194.7	184.4
37.5°	266.9	245.7	204.6	175.9	165.3
40°	253.8	230.8	186.2	156.8	145.8
42.5°	241.1	215.6	168.9	138.8	128.9
45°	227.6	200.4	151.5	121.1	111.5
47.5°	213.8	184.4	134.2	104.4	94.9
50°	199.7	168.9	117.2	88.1	79.6
52.5°	185.5	153.3	101.2	72.6	65.1
55°	171.3	137.4	85.0	58.8	51.7
57.5°	157.2	121.8	69.7	46.0	39.6
60°	142.7	105.8	55.2	34.0	32.2
62.5°	128.1	90.3	42.8	28.0	26.5
65°	113.3	74.3	30.8	22.7	21.2
67.5°	98.4	59.8	22.3	17.3	16.3
70°	82.8	45.7	17.3	13.1	12.0
72.5°	68.0	32.9	12.4	9.6	9.2
75°	54.5	21.2	8.5	7.1	7.1
77.5°	41.1	12.7	6.0	5.3	5.3
80°	28.7	7.4	4.2	3.9	3.9
82.5°	17.3	3.9	2.8	2.5	2.5
85°	7.4	2.1	1.8	1.4	1.4
87.5°	1.4	0.7	0.7	0.7	0.7
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	14.62	16.06	14.98	16.38	16.69	7.25	8.70	7.62	9.01	9.32
	3H	16.18	17.46	16.55	17.79	18.15	7.81	9.10	8.19	9.43	9.79
	4H	16.70	17.90	17.10	18.25	18.63	7.94	9.14	8.34	9.49	9.87
	6H	17.03	18.14	17.45	18.51	18.90	8.00	9.11	8.42	9.48	9.87
	8H	17.12	18.17	17.54	18.56	18.96	8.01	9.06	8.44	9.45	9.85
	12H	17.14	18.15	17.57	18.53	18.96	8.00	9.00	8.43	9.39	9.82
4H	2H	14.51	15.72	14.91	16.07	16.45	7.82	9.02	8.22	9.37	9.75
	3H	16.18	17.17	16.59	17.57	17.97	8.49	9.48	8.90	9.88	10.28
	4H	16.73	17.61	17.16	18.03	18.47	8.65	9.53	9.08	9.95	10.39
	6H	17.12	17.89	17.58	18.33	18.79	8.76	9.52	9.22	9.97	10.43
	8H	17.23	17.94	17.69	18.38	18.85	8.77	9.48	9.24	9.93	10.40
	12H	17.27	17.91	17.76	18.39	18.86	8.77	9.41	9.26	9.89	10.36
8H	4H	16.63	17.34	17.10	17.79	18.26	8.92	9.63	9.38	10.07	10.54
	6H	17.02	17.60	17.52	18.10	18.58	9.05	9.63	9.55	10.13	10.61
	8H	17.13	17.65	17.64	18.16	18.65	9.08	9.60	9.60	10.12	10.61
	12H	17.19	17.65	17.70	18.14	18.71	9.10	9.56	9.61	10.06	10.63
12H	4H	16.59	17.23	17.08	17.71	18.18	8.93	9.56	9.42	10.04	10.52
	6H	16.96	17.49	17.48	18.00	18.49	9.06	9.59	9.58	10.10	10.59
	8H	17.09	17.56	17.61	18.05	18.62	9.12	9.58	9.63	10.08	10.65