

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: P1056431

Luminaire Tested: S125R3DR-S375D935-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056431
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-S375D935-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

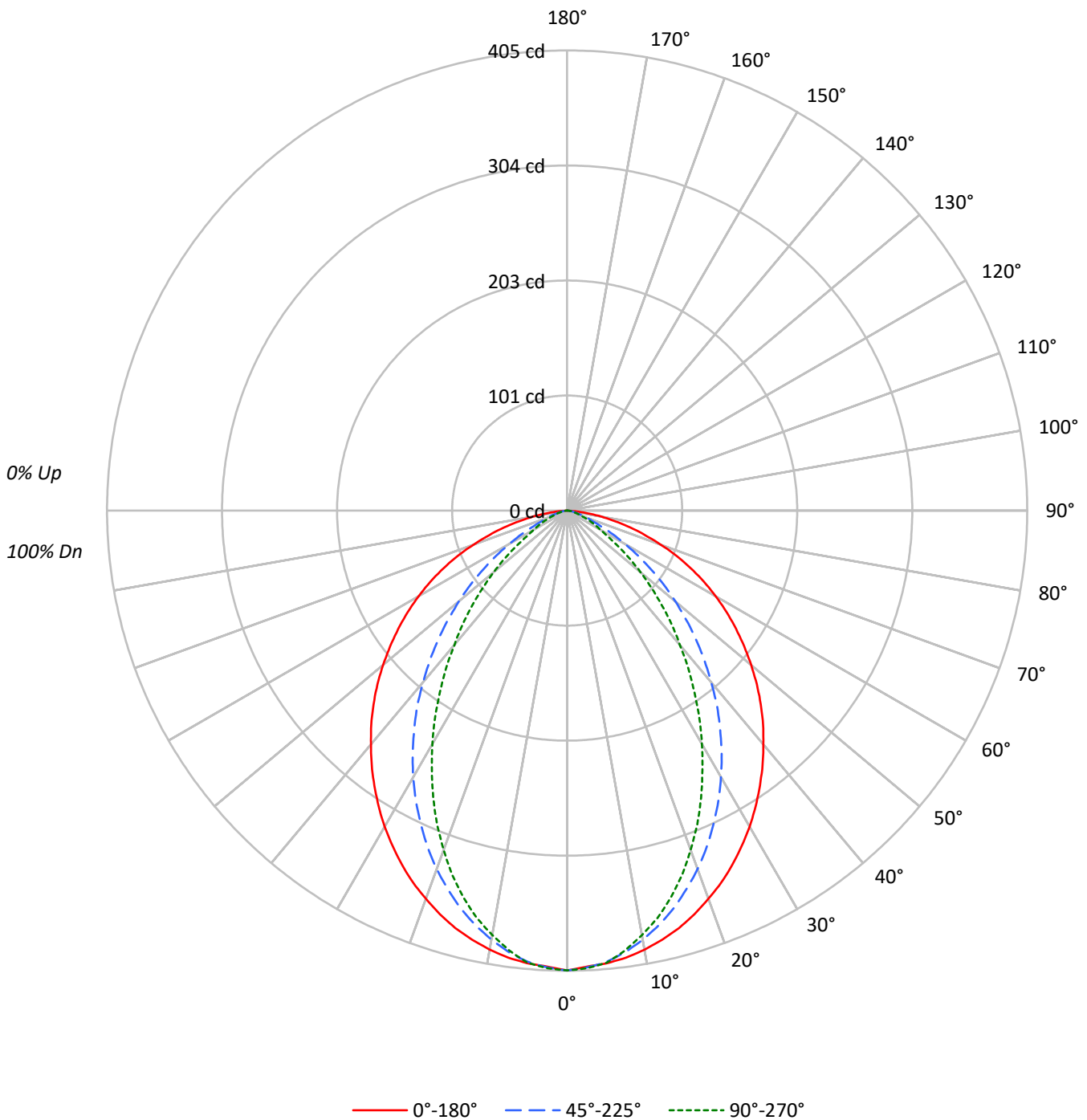
Lumens per Lamp: N/A
Luminaire Lumens: 731.5 lumens
Efficiency: N/A
Efficacy: 58.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 12.6
Input Voltage (V): 120
Input Current (A_{in}): 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°	2861	2861	2861
5°	2838	2829	2835
10°	2817	2752	2723
15°	2784	2652	2581
20°	2735	2526	2391
25°	2683	2377	2175
30°	2622	2211	1936
35°	2552	2025	1685
40°	2480	1819	1425
45°	2409	1604	1180
50°	2325	1364	927
55°	2236	1108	674
60°	2135	827	482
65°	2006	545	376
70°	1813	380	263
75°	1576	246	205
80°	1238	183	167
85°	641	154	122

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2409 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.7	5.2
10°-20°	102.5	14.0
20°-30°	141.7	19.4
30°-40°	150.1	20.5
40°-50°	131.1	17.9
50°-60°	93.2	12.7
60°-70°	51.8	7.1
70°-80°	19.9	2.7
80°-90°	3.4	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°	281.9	38.5
0°-40°	432.1	59.1
0°-60°	656.3	89.7
0°-90°	731.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	731.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	405	405	405	405	405	
5°	400	403	399	398	400	38
15°	380	377	362	354	353	107
25°	344	332	305	286	279	158
35°	296	275	235	206	195	185
45°	241	212	160	128	118	186
55°	181	145	90	62	55	162
65°	120	79	33	24	22	119
75°	58	22	9	8	8	61
85°	8	2	2	2	2	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	404.7	404.7	404.7	404.7	404.7
2.5°	401.7	405.9	402.5	402.9	403.2
5°	399.9	402.9	398.7	397.6	399.5
7.5°	396.9	399.1	392.0	389.4	390.5
10°	392.4	393.1	383.4	379.6	379.3
12.5°	386.7	385.6	373.6	367.6	367.3
15°	380.4	377.0	362.4	354.5	352.6
17.5°	372.5	367.3	349.3	339.2	336.2
20°	363.5	356.4	335.8	322.7	317.8
22.5°	354.5	344.8	320.8	304.3	299.1
25°	344.0	332.4	304.7	285.9	278.8
27.5°	332.8	318.9	288.2	266.5	257.8
30°	321.2	305.1	270.9	246.6	237.2
32.5°	308.8	290.4	253.0	226.4	216.6
35°	295.7	275.4	234.6	206.1	195.2
37.5°	282.6	260.1	216.6	186.3	175.0
40°	268.7	244.3	197.1	166.0	154.4
42.5°	255.2	228.2	178.8	146.9	136.4
45°	241.0	212.1	160.4	128.2	118.0
47.5°	226.4	195.2	142.0	110.6	100.4
50°	211.4	178.8	124.0	93.3	84.3
52.5°	196.4	162.3	107.2	76.8	69.0
55°	181.4	145.4	89.9	62.2	54.7
57.5°	166.4	128.9	73.8	48.7	42.0
60°	151.0	112.1	58.5	36.0	34.1
62.5°	135.7	95.6	45.3	29.6	28.1
65°	119.9	78.7	32.6	24.0	22.5
67.5°	104.2	63.3	23.6	18.4	17.2
70°	87.7	48.3	18.4	13.9	12.7
72.5°	72.0	34.9	13.1	10.1	9.7
75°	57.7	22.5	9.0	7.5	7.5
77.5°	43.5	13.5	6.4	5.6	5.6
80°	30.4	7.9	4.5	4.1	4.1
82.5°	18.4	4.1	3.0	2.6	2.6
85°	7.9	2.2	1.9	1.5	1.5
87.5°	1.5	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	14.81	16.26	15.18	16.57	16.89	7.45	8.90	7.82	9.21	9.52
	3H	16.37	17.66	16.75	17.99	18.35	8.01	9.30	8.39	9.63	9.99
	4H	16.89	18.10	17.30	18.45	18.83	8.14	9.34	8.54	9.69	10.07
	6H	17.23	18.34	17.65	18.71	19.10	8.20	9.31	8.62	9.68	10.07
	8H	17.32	18.37	17.74	18.76	19.16	8.21	9.26	8.63	9.65	10.05
	12H	17.34	18.34	17.77	18.73	19.16	8.20	9.20	8.63	9.58	10.01
4H	2H	14.71	15.91	15.11	16.26	16.64	8.02	9.22	8.42	9.57	9.95
	3H	16.38	17.36	16.79	17.77	18.17	8.69	9.68	9.10	10.08	10.48
	4H	16.93	17.81	17.36	18.23	18.67	8.85	9.73	9.28	10.15	10.59
	6H	17.32	18.08	17.78	18.53	18.99	8.96	9.72	9.42	10.16	10.63
	8H	17.42	18.14	17.89	18.58	19.05	8.97	9.68	9.43	10.13	10.59
	12H	17.47	18.11	17.96	18.59	19.06	8.97	9.60	9.45	10.08	10.55
8H	4H	16.83	17.54	17.30	17.99	18.46	9.12	9.83	9.58	10.27	10.74
	6H	17.22	17.80	17.72	18.30	18.77	9.25	9.83	9.75	10.33	10.81
	8H	17.33	17.85	17.84	18.36	18.85	9.27	9.80	9.79	10.31	10.80
	12H	17.39	17.85	17.90	18.35	18.91	9.30	9.76	9.81	10.25	10.82
12H	4H	16.79	17.43	17.28	17.91	18.38	9.13	9.76	9.62	10.25	10.72
	6H	17.16	17.69	17.68	18.20	18.69	9.26	9.79	9.78	10.30	10.79
	8H	17.29	17.76	17.81	18.25	18.82	9.32	9.78	9.83	10.27	10.84