

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: P1056566

Luminaire Tested: S125R3DR-H375D935-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056566
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-H375D935-X4F0-XX-UDD-F-S
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

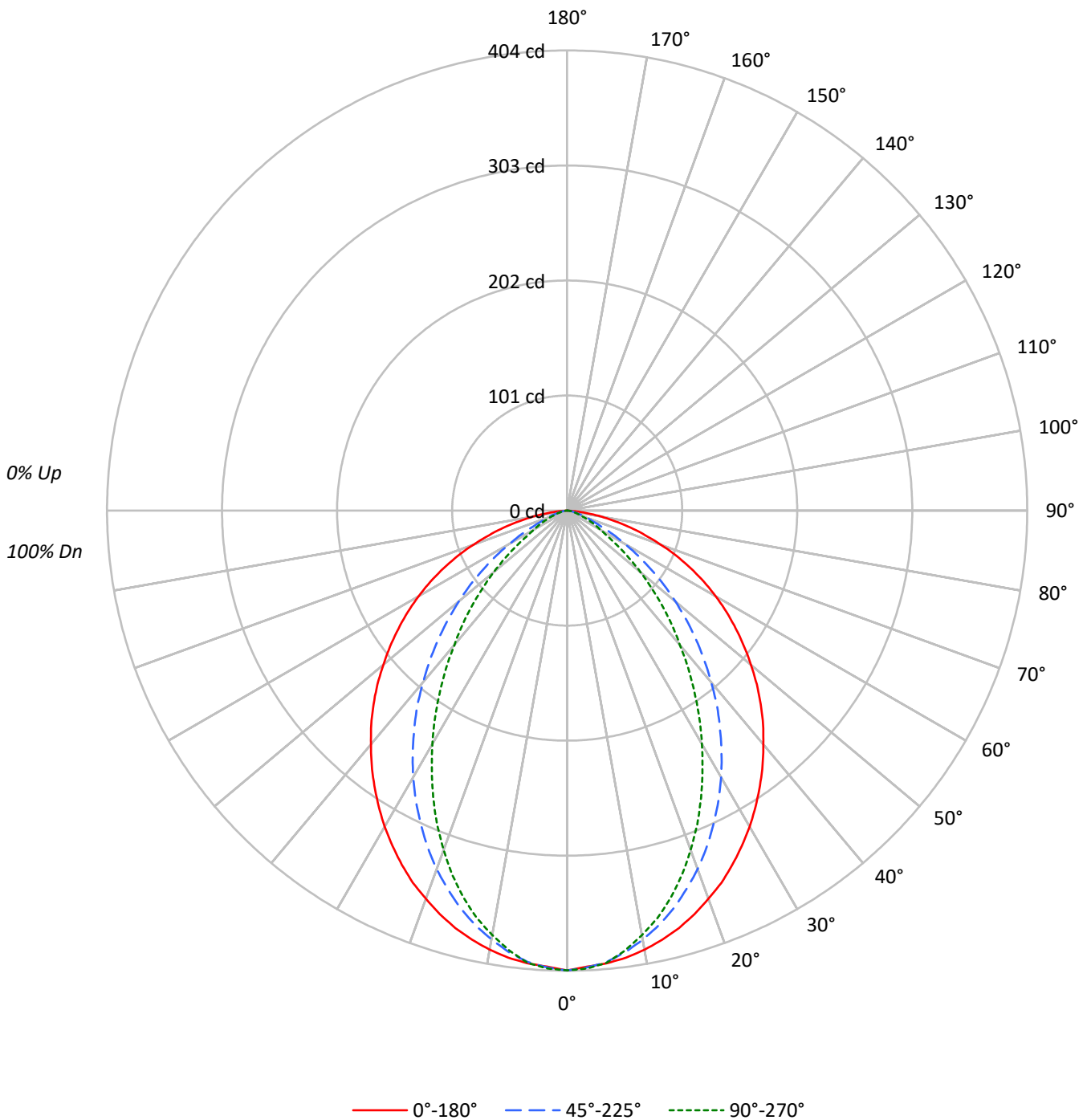
Lumens per Lamp: N/A
Luminaire Lumens: 729.7 lumens
Efficiency: N/A
Efficacy: 62.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
Input Voltage (V): 120
Input Current (A_{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°	2854	2854	2854
5°	2831	2823	2828
10°	2810	2745	2716
15°	2777	2646	2575
20°	2728	2520	2385
25°	2677	2370	2169
30°	2615	2206	1931
35°	2546	2019	1681
40°	2473	1814	1421
45°	2403	1600	1178
50°	2318	1360	925
55°	2230	1106	673
60°	2131	824	481
65°	2001	544	375
70°	1809	378	263
75°	1573	246	205
80°	1234	183	167
85°	641	154	122

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2403 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.6	5.2
10°-20°	102.2	14.0
20°-30°	141.4	19.4
30°-40°	149.8	20.5
40°-50°	130.7	17.9
50°-60°	93.0	12.7
60°-70°	51.7	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°	281.2	38.5
0°-40°	431.0	59.1
0°-60°	654.7	89.7
0°-90°	729.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	729.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	404	404	404	404	404	
5°	399	402	398	397	398	38
15°	379	376	362	354	352	107
25°	343	332	304	285	278	158
35°	295	275	234	206	195	185
45°	240	212	160	128	118	185
55°	181	145	90	62	55	162
65°	120	78	32	24	22	118
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°	403.7	403.7	403.7	403.7	403.7
2.5°	400.8	404.9	401.5	401.9	402.3
5°	398.9	401.9	397.8	396.6	398.5
7.5°	395.9	398.1	391.0	388.4	389.5
10°	391.4	392.2	382.4	378.7	378.3
12.5°	385.8	384.7	372.7	366.7	366.4
15°	379.4	376.1	361.5	353.7	351.8
17.5°	371.6	366.4	348.4	338.3	335.3
20°	362.6	355.5	335.0	321.9	317.0
22.5°	353.7	343.9	320.0	303.6	298.3
25°	343.2	331.6	303.9	285.2	278.1
27.5°	332.0	318.1	287.5	265.8	257.2
30°	320.4	304.3	270.3	246.0	236.6
32.5°	308.0	289.7	252.3	225.8	216.1
35°	295.0	274.8	234.0	205.6	194.8
37.5°	281.9	259.4	216.1	185.8	174.6
40°	268.0	243.7	196.6	165.6	154.0
42.5°	254.6	227.7	178.3	146.5	136.1
45°	240.4	211.6	160.0	127.9	117.8
47.5°	225.8	194.8	141.7	110.3	100.2
50°	210.8	178.3	123.7	93.1	84.1
52.5°	195.9	161.9	106.9	76.6	68.8
55°	180.9	145.0	89.7	62.1	54.6
57.5°	166.0	128.6	73.6	48.6	41.9
60°	150.7	111.8	58.3	35.9	34.0
62.5°	135.3	95.3	45.2	29.5	28.0
65°	119.6	78.5	32.5	23.9	22.4
67.5°	103.9	63.2	23.6	18.3	17.2
70°	87.5	48.2	18.3	13.8	12.7
72.5°	71.8	34.8	13.1	10.1	9.7
75°	57.6	22.4	9.0	7.5	7.5
77.5°	43.4	13.5	6.4	5.6	5.6
80°	30.3	7.9	4.5	4.1	4.1
82.5°	18.3	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	16.25	15.17	16.56	16.88	7.44	8.89	7.81	9.20	9.52
	3H	16.36	17.65	16.74	17.98	18.34	8.01	9.29	8.39	9.62	9.99
	4H	16.89	18.09	17.29	18.44	18.82	8.13	9.33	8.53	9.68	10.06
	6H	17.22	18.33	17.64	18.70	19.09	8.20	9.30	8.61	9.67	10.06
	8H	17.31	18.36	17.73	18.75	19.15	8.20	9.25	8.63	9.64	10.04
	12H	17.33	18.34	17.76	18.72	19.15	8.19	9.20	8.62	9.58	10.01
4H	2H	14.70	15.90	15.10	16.25	16.63	8.01	9.21	8.41	9.56	9.94
	3H	16.37	17.36	16.78	17.76	18.16	8.68	9.67	9.09	10.07	10.47
	4H	16.92	17.80	17.35	18.22	18.66	8.84	9.72	9.27	10.14	10.58
	6H	17.31	18.08	17.77	18.52	18.98	8.95	9.71	9.41	10.16	10.62
	8H	17.42	18.13	17.88	18.57	19.04	8.96	9.67	9.43	10.12	10.59
	12H	17.46	18.10	17.95	18.58	19.05	8.96	9.59	9.45	10.08	10.55
8H	4H	16.82	17.53	17.29	17.98	18.45	9.11	9.82	9.57	10.27	10.74
	6H	17.21	17.79	17.71	18.29	18.77	9.24	9.83	9.74	10.32	10.80
	8H	17.32	17.84	17.83	18.35	18.84	9.27	9.79	9.79	10.31	10.80
	12H	17.38	17.84	17.89	18.34	18.91	9.29	9.75	9.80	10.25	10.82
12H	4H	16.78	17.42	17.27	17.90	18.37	9.12	9.76	9.61	10.24	10.71
	6H	17.16	17.68	17.67	18.19	18.68	9.25	9.78	9.77	10.29	10.78
	8H	17.28	17.75	17.80	18.24	18.81	9.31	9.77	9.82	10.27	10.84