

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: P1056430

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056430
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-S375D935-X4F0-XX-UDD-F-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

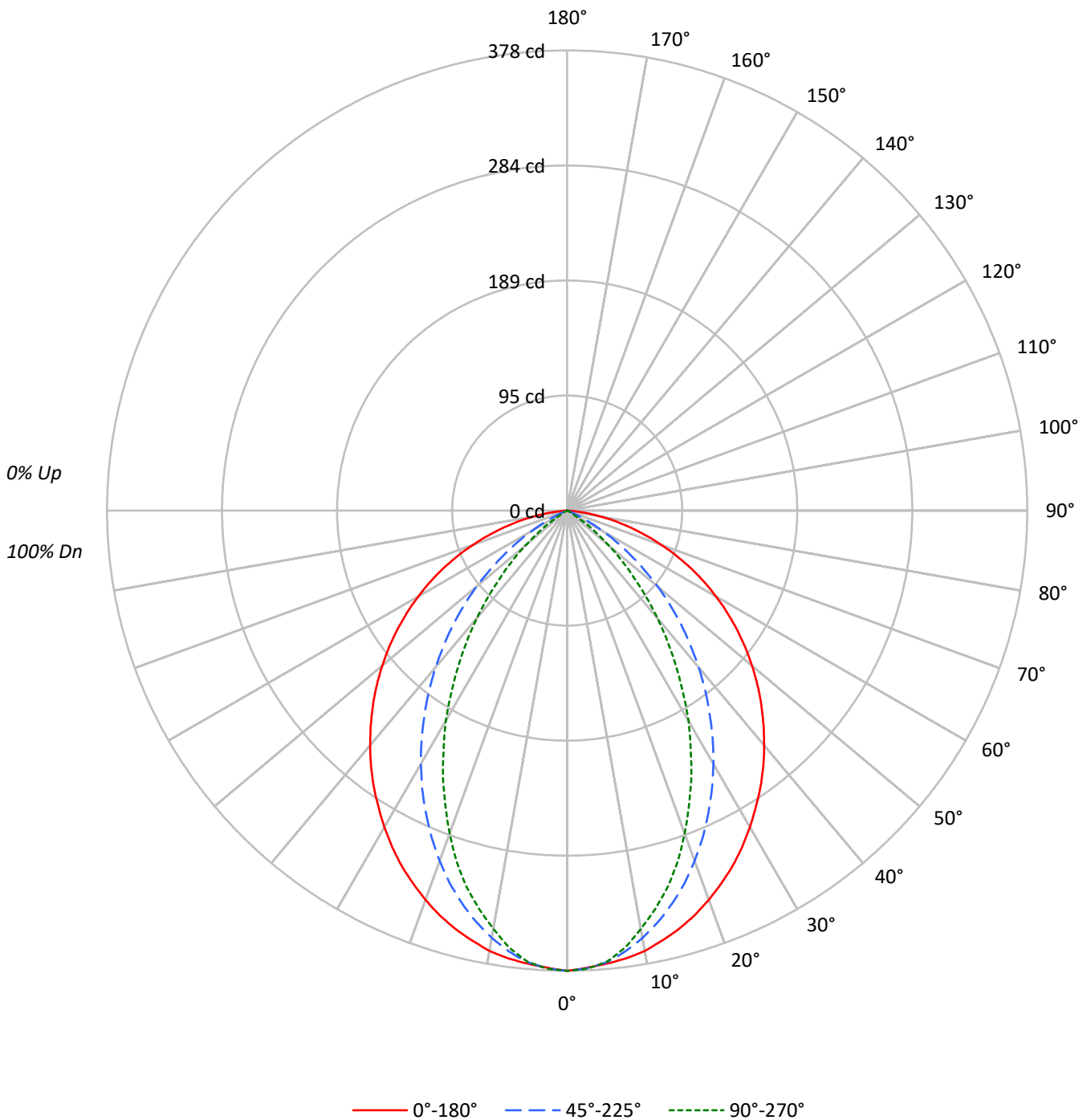
Lumens per Lamp: N/A
Luminaire Lumens: 612.9 lumens
Efficiency: N/A
Efficacy: 48.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	2673	2673	2673
5°	2651	2643	2641
10°	2637	2558	2505
15°	2603	2444	2340
20°	2560	2304	2123
25°	2511	2140	1882
30°	2451	1961	1628
35°	2390	1762	1345
40°	2324	1549	1065
45°	2255	1323	772
50°	2180	1068	498
55°	2096	780	222
60°	1998	482	64
65°	1875	176	37
70°	1697	62	14
75°	1475	19	11
80°	1128	16	0
85°	519	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2255 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.1	5.7
10°-20°	94.3	15.4
20°-30°	127.6	20.8
30°-40°	131.1	21.4
40°-50°	108.6	17.7
50°-60°	69.7	11.4
60°-70°	33.7	5.5
70°-80°	11.4	1.9
80°-90°	1.5	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°	257.0	41.9
0°-40°	388.1	63.3
0°-60°	566.3	92.4
0°-90°	612.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	612.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	378	378	378	378	378	
5°	374	377	372	370	372	35
15°	356	351	334	322	320	100
25°	322	306	274	250	241	148
35°	277	250	204	169	156	173
45°	226	188	132	91	77	174
55°	170	125	63	28	18	152
65°	112	62	10	3	2	111
75°	54	12	1	0	0	57
85°	6	0	0	0	0	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	378.1	378.1	378.1	378.1	378.1
2.5°	375.9	378.9	376.3	375.9	376.6
5°	373.6	376.6	372.5	370.3	372.1
7.5°	371.0	372.5	365.4	361.6	362.4
10°	367.3	366.9	356.4	350.0	348.9
12.5°	361.6	359.8	345.9	336.9	335.0
15°	355.6	351.1	333.9	322.3	319.7
17.5°	348.5	341.4	320.8	305.8	302.1
20°	340.3	330.5	306.2	287.8	282.2
22.5°	331.3	318.9	290.8	269.1	261.6
25°	321.9	306.2	274.3	249.6	241.3
27.5°	311.4	293.1	257.8	229.7	219.6
30°	300.2	279.2	240.2	209.5	199.4
32.5°	288.6	265.3	222.6	189.3	176.9
35°	276.9	250.3	204.2	168.6	155.9
37.5°	264.6	235.3	186.3	149.2	135.3
40°	251.8	220.0	167.9	128.9	115.4
42.5°	238.7	204.2	149.5	109.8	95.9
45°	225.6	188.5	132.3	91.4	77.2
47.5°	212.1	172.4	114.3	73.5	61.1
50°	198.2	156.6	97.1	57.3	45.3
52.5°	184.4	140.5	79.4	41.6	30.7
55°	170.1	124.8	63.3	27.7	18.0
57.5°	155.9	108.7	48.3	15.4	6.7
60°	141.3	93.3	34.1	5.2	4.5
62.5°	127.0	76.8	21.4	4.1	3.4
65°	112.1	61.8	10.5	3.0	2.2
67.5°	97.4	47.6	4.5	1.9	1.1
70°	82.1	34.5	3.0	1.1	0.7
72.5°	67.8	22.1	1.9	0.7	0.4
75°	54.0	11.6	0.7	0.4	0.4
77.5°	40.5	4.9	0.4	0.4	0.4
80°	27.7	2.2	0.4	0.4	0.0
82.5°	16.5	0.7	0.4	0.4	0.0
85°	6.4	0.0	0.0	0.0	0.0
87.5°	0.4	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	14.49	15.87	14.85	16.18	16.50	0.00	0.74	0.00	1.06	1.37
	3H	16.04	17.26	16.41	17.59	17.96	0.00	0.51	0.00	0.84	1.20
	4H	16.56	17.70	16.96	18.05	18.43	0.00	0.36	0.00	0.71	1.09
	6H	16.90	17.95	17.31	18.32	18.71	0.00	0.20	0.00	0.56	0.96
	8H	16.98	17.98	17.41	18.37	18.77	0.00	0.10	0.00	0.49	0.89
	12H	17.00	17.95	17.43	18.33	18.76	0.00	0.02	0.00	0.40	0.83
4H	2H	14.29	15.43	14.69	15.78	16.17	0.22	1.37	0.62	1.72	2.10
	3H	15.90	16.84	16.31	17.24	17.64	0.17	1.10	0.58	1.50	1.91
	4H	16.42	17.26	16.86	17.68	18.12	0.09	0.93	0.53	1.34	1.79
	6H	16.80	17.52	17.26	17.96	18.43	0.03	0.75	0.49	1.19	1.66
	8H	16.90	17.57	17.37	18.02	18.49	0.00	0.65	0.45	1.09	1.56
	12H	16.93	17.53	17.42	18.01	18.48	0.00	0.53	0.42	1.01	1.48
8H	4H	16.30	16.97	16.77	17.41	17.88	1.11	1.78	1.58	2.23	2.70
	6H	16.65	17.20	17.15	17.70	18.18	1.03	1.58	1.53	2.07	2.56
	8H	16.75	17.24	17.27	17.75	18.24	0.98	1.47	1.50	1.99	2.48
	12H	16.79	17.23	17.30	17.72	18.29	0.94	1.37	1.45	1.87	2.44
12H	4H	16.25	16.85	16.74	17.33	17.80	1.19	1.78	1.68	2.27	2.74
	6H	16.59	17.09	17.11	17.60	18.09	1.09	1.59	1.61	2.10	2.59
	8H	16.71	17.14	17.22	17.63	18.20	1.06	1.50	1.58	1.99	2.56