

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: P1056432

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056432
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)
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-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

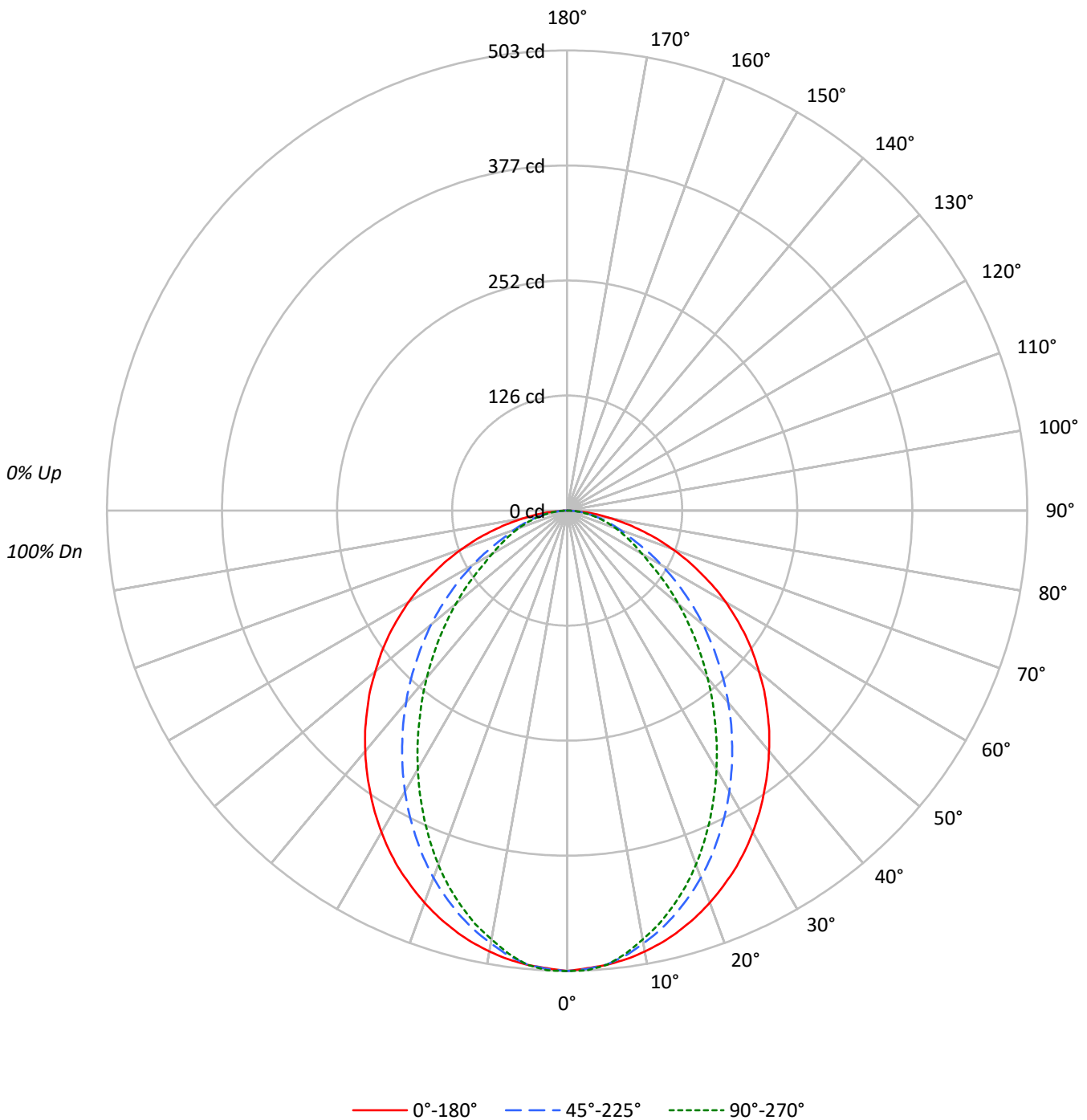
Lumens per Lamp: N/A
Luminaire Lumens: 1066.7 lumens
Efficiency: N/A
Efficacy: 84.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 12.6
Input Voltage (V): 120
Input Current (Ain): 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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3558	3558	3558
5°	3537	3535	3537
10°	3513	3449	3416
15°	3478	3343	3275
20°	3431	3214	3099
25°	3379	3061	2888
30°	3313	2894	2664
35°	3241	2713	2432
40°	3168	2528	2203
45°	3091	2334	1975
50°	3009	2135	1748
55°	2933	1917	1520
60°	2829	1685	1335
65°	2690	1429	1241
70°	2526	1277	1162
75°	2283	1177	1095
80°	1983	1067	1022
85°	1549	941	941

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3091 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.1	4.4
10°-20°	129.3	12.1
20°-30°	182.6	17.1
30°-40°	201.1	18.8
40°-50°	187.6	17.6
50°-60°	149.7	14.0
60°-70°	100.8	9.4
70°-80°	53.7	5.0
80°-90°	14.9	1.4
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°	359.0	33.7
0°-40°	560.1	52.5
0°-60°	897.4	84.1
0°-90°	1066.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1066.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	503	503	503	503	503	
5°	498	502	498	497	498	47
15°	475	473	457	449	448	134
25°	433	420	392	375	370	199
35°	376	353	314	290	282	235
45°	309	280	234	205	198	239
55°	238	202	156	131	123	212
65°	161	126	85	76	74	159
75°	84	56	43	40	40	89
85°	19	13	12	12	12	23
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	503.3	503.3	503.3	503.3	503.3
2.5°	500.7	504.8	501.4	502.2	502.9
5°	498.4	502.5	498.1	496.6	498.4
7.5°	494.7	498.1	490.6	487.2	488.7
10°	489.4	491.7	480.4	475.9	475.9
12.5°	483.1	483.1	469.6	463.2	463.2
15°	475.2	472.6	456.8	449.0	447.5
17.5°	466.2	461.3	442.6	432.5	430.6
20°	456.1	448.2	427.2	414.1	411.9
22.5°	444.8	434.7	410.4	394.2	391.6
25°	433.2	420.1	392.4	375.1	370.3
27.5°	420.1	404.4	374.0	354.5	348.5
30°	405.9	387.9	354.5	332.8	326.4
32.5°	391.2	371.0	334.7	311.4	304.3
35°	375.5	353.4	314.4	289.7	281.8
37.5°	359.8	335.8	294.6	268.7	260.5
40°	343.3	317.0	273.9	247.3	238.7
42.5°	326.8	298.7	253.7	226.7	217.7
45°	309.2	279.9	233.5	205.0	197.5
47.5°	292.3	260.8	213.6	185.9	177.6
50°	273.6	241.0	194.1	166.4	158.9
52.5°	256.3	221.5	174.6	148.8	140.9
55°	238.0	202.0	155.5	130.8	123.3
57.5°	218.9	182.5	137.2	113.9	106.8
60°	200.1	163.0	119.2	97.8	94.4
62.5°	181.0	144.7	102.3	85.8	83.6
65°	160.8	125.5	85.4	75.7	74.2
67.5°	141.7	107.2	72.0	66.3	64.8
70°	122.2	88.8	61.8	57.0	56.2
72.5°	103.1	71.2	52.1	48.7	48.0
75°	83.6	55.5	43.1	40.5	40.1
77.5°	65.6	41.6	34.1	33.0	32.2
80°	48.7	31.1	26.2	25.5	25.1
82.5°	33.4	21.4	18.7	18.7	18.0
85°	19.1	13.1	11.6	12.0	11.6
87.5°	7.1	5.6	5.2	5.6	5.6
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	15.70	17.24	16.06	17.55	17.87	12.08	13.62	12.44	13.93	14.25
	3H	17.48	18.87	17.86	19.19	19.56	13.55	14.94	13.93	15.27	15.63
	4H	18.14	19.44	18.54	19.78	20.16	14.15	15.44	14.55	15.79	16.17
	6H	18.61	19.81	19.03	20.18	20.57	14.61	15.81	15.02	16.17	16.57
	8H	18.77	19.91	19.19	20.30	20.70	14.77	15.91	15.19	16.30	16.70
	12H	18.86	19.96	19.29	20.34	20.77	14.88	15.98	15.31	16.36	16.79
4H	2H	15.83	17.13	16.23	17.48	17.86	12.76	14.05	13.15	14.40	14.78
	3H	17.80	18.88	18.21	19.28	19.68	14.43	15.51	14.84	15.91	16.31
	4H	18.55	19.52	18.98	19.94	20.38	15.14	16.11	15.57	16.53	16.96
	6H	19.14	19.99	19.60	20.43	20.89	15.72	16.57	16.18	17.01	17.47
	8H	19.35	20.14	19.81	20.59	21.05	15.93	16.72	16.39	17.17	17.63
	12H	19.50	20.21	19.98	20.68	21.15	16.09	16.80	16.57	17.28	17.75
8H	4H	18.61	19.40	19.07	19.85	20.32	15.50	16.29	15.96	16.74	17.20
	6H	19.27	19.93	19.77	20.42	20.89	16.20	16.86	16.70	17.35	17.83
	8H	19.53	20.11	20.04	20.62	21.11	16.49	17.08	17.00	17.58	18.07
	12H	19.73	20.26	20.24	20.75	21.31	16.73	17.25	17.24	17.74	18.30
12H	4H	18.60	19.31	19.09	19.79	20.26	15.55	16.26	16.03	16.74	17.21
	6H	19.27	19.86	19.78	20.36	20.85	16.27	16.86	16.79	17.37	17.86
	8H	19.56	20.08	20.07	20.57	21.14	16.62	17.14	17.13	17.63	18.19