

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: P1056567

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056567
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-H375D935-X4F0-XX-UDD-F-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

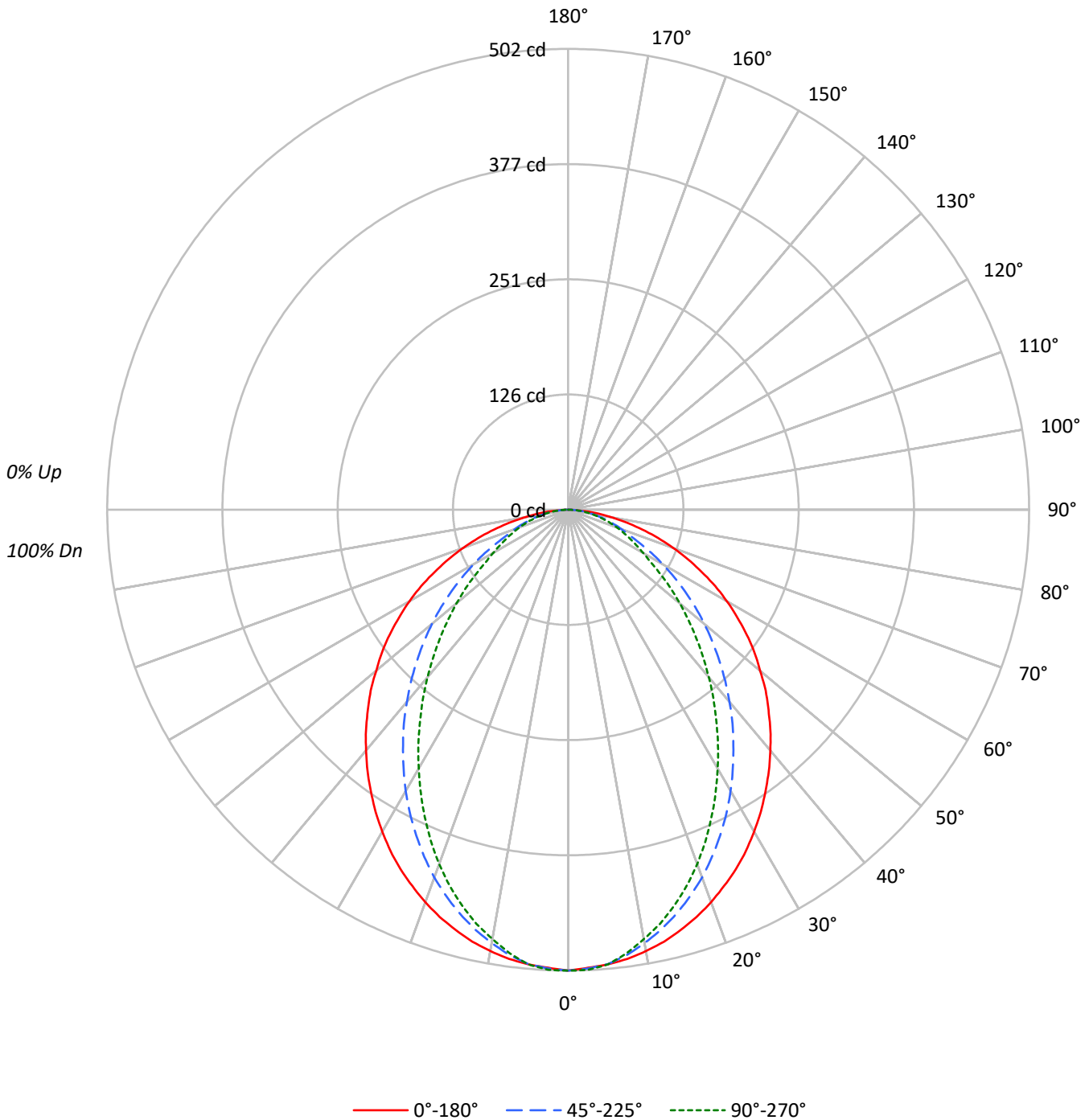
Lumens per Lamp: N/A
Luminaire Lumens: 1064.1 lumens
Efficiency: N/A
Efficacy: 91.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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°	3550	3550	3550
5°	3528	3525	3528
10°	3504	3441	3408
15°	3469	3335	3267
20°	3423	3206	3090
25°	3371	3053	2881
30°	3305	2887	2658
35°	3233	2707	2426
40°	3160	2522	2197
45°	3083	2328	1970
50°	3001	2129	1743
55°	2926	1912	1516
60°	2822	1681	1332
65°	2683	1425	1238
70°	2520	1275	1160
75°	2278	1174	1093
80°	1979	1067	1018
85°	1549	941	941

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3083 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.0	4.4
10°-20°	129.0	12.1
20°-30°	182.2	17.1
30°-40°	200.6	18.8
40°-50°	187.1	17.6
50°-60°	149.4	14.0
60°-70°	100.5	9.4
70°-80°	53.5	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°	358.2	33.7
0°-40°	558.7	52.5
0°-60°	895.2	84.1
0°-90°	1064.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1064.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	502	502	502	502	502	
5°	497	501	497	495	497	47
15°	474	471	456	448	446	134
25°	432	419	391	374	369	199
35°	375	352	314	289	281	234
45°	308	279	233	204	197	238
55°	237	202	155	130	123	212
65°	160	125	85	76	74	159
75°	83	55	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°	502.1	502.1	502.1	502.1	502.1
2.5°	499.4	503.6	500.2	500.9	501.7
5°	497.2	501.3	496.8	495.3	497.2
7.5°	493.5	496.8	489.4	486.0	487.5
10°	488.2	490.5	479.3	474.8	474.8
12.5°	481.9	481.9	468.4	462.1	462.1
15°	474.0	471.4	455.7	447.9	446.4
17.5°	465.1	460.2	441.5	431.4	429.5
20°	455.0	447.1	426.2	413.1	410.8
22.5°	443.7	433.7	409.4	393.3	390.7
25°	432.2	419.1	391.4	374.2	369.4
27.5°	419.1	403.4	373.1	353.7	347.7
30°	404.9	386.9	353.7	332.0	325.6
32.5°	390.3	370.1	333.8	310.7	303.6
35°	374.6	352.5	313.7	289.0	281.1
37.5°	358.9	335.0	293.8	268.0	259.8
40°	342.4	316.3	273.3	246.7	238.1
42.5°	326.0	297.9	253.1	226.2	217.2
45°	308.4	279.3	232.9	204.5	197.0
47.5°	291.6	260.2	213.1	185.4	177.2
50°	272.9	240.4	193.6	166.0	158.5
52.5°	255.7	220.9	174.2	148.4	140.6
55°	237.4	201.5	155.1	130.5	123.0
57.5°	218.3	182.1	136.8	113.6	106.5
60°	199.6	162.6	118.9	97.6	94.2
62.5°	180.6	144.3	102.1	85.6	83.4
65°	160.4	125.2	85.2	75.5	74.0
67.5°	141.3	106.9	71.8	66.2	64.7
70°	121.9	88.6	61.7	56.8	56.1
72.5°	102.8	71.0	52.0	48.6	47.9
75°	83.4	55.3	43.0	40.4	40.0
77.5°	65.4	41.5	34.0	32.9	32.2
80°	48.6	31.0	26.2	25.4	25.0
82.5°	33.3	21.3	18.7	18.7	17.9
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	15.69	17.23	16.06	17.54	17.86	12.07	13.61	12.43	13.92	14.24
	3H	17.48	18.86	17.85	19.19	19.55	13.55	14.93	13.92	15.26	15.62
	4H	18.13	19.43	18.53	19.78	20.15	14.14	15.44	14.54	15.78	16.16
	6H	18.60	19.81	19.02	20.17	20.56	14.60	15.80	15.01	16.17	16.56
	8H	18.76	19.90	19.18	20.29	20.69	14.76	15.90	15.19	16.29	16.69
	12H	18.85	19.95	19.28	20.33	20.76	14.87	15.97	15.30	16.35	16.78
4H	2H	15.82	17.12	16.22	17.47	17.85	12.75	14.04	13.15	14.39	14.77
	3H	17.79	18.88	18.20	19.27	19.68	14.42	15.51	14.83	15.90	16.31
	4H	18.54	19.51	18.97	19.93	20.37	15.13	16.10	15.56	16.52	16.96
	6H	19.13	19.98	19.59	20.42	20.88	15.71	16.56	16.17	17.00	17.46
	8H	19.34	20.13	19.80	20.58	21.04	15.92	16.71	16.38	17.16	17.63
	12H	19.49	20.20	19.97	20.67	21.15	16.08	16.79	16.56	17.27	17.74
8H	4H	18.60	19.40	19.07	19.84	20.31	15.49	16.29	15.96	16.73	17.20
	6H	19.26	19.92	19.76	20.41	20.89	16.19	16.85	16.69	17.34	17.82
	8H	19.52	20.10	20.03	20.61	21.10	16.48	17.07	16.99	17.58	18.06
	12H	19.72	20.25	20.23	20.74	21.30	16.72	17.24	17.23	17.73	18.30
12H	4H	18.60	19.31	19.08	19.78	20.25	15.54	16.25	16.02	16.73	17.20
	6H	19.26	19.85	19.77	20.36	20.84	16.27	16.86	16.78	17.37	17.85
	8H	19.55	20.07	20.06	20.56	21.13	16.61	17.13	17.12	17.62	18.19