

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: P1056428

Luminaire Tested: S125R3DR-S375D930-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056428
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-S375D930-X4F0-XX-UDD-F-S
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

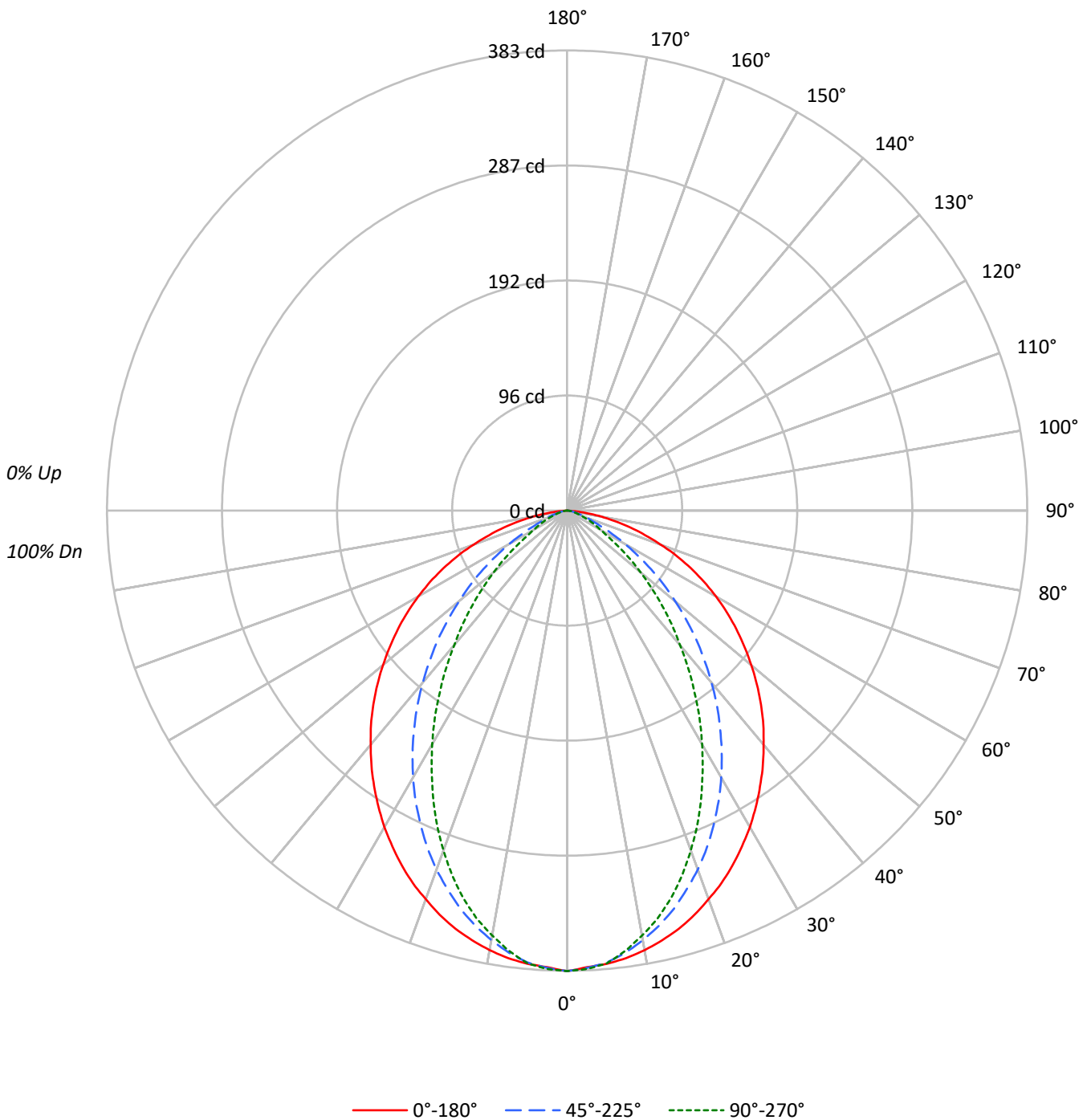
Lumens per Lamp: N/A
Luminaire Lumens: 692.7 lumens
Efficiency: N/A
Efficacy: 55.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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	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					100			
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77					77			
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67					67			
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59					59			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52					52			
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47					47			
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42					42			
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38					38			
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35					35			
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32					32			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2710	2710	2710
5°	2687	2680	2685
10°	2667	2606	2578
15°	2636	2512	2444
20°	2589	2392	2264
25°	2541	2250	2059
30°	2482	2095	1833
35°	2416	1917	1596
40°	2348	1723	1349
45°	2281	1519	1118
50°	2201	1292	878
55°	2117	1050	638
60°	2022	783	457
65°	1900	517	356
70°	1716	360	250
75°	1491	232	194
80°	1168	175	159
85°	608	146	114

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2281 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.7	5.2
10°-20°	97.1	14.0
20°-30°	134.2	19.4
30°-40°	142.2	20.5
40°-50°	124.1	17.9
50°-60°	88.3	12.7
60°-70°	49.1	7.1
70°-80°	18.9	2.7
80°-90°	3.3	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°	267.0	38.5
0°-40°	409.1	59.1
0°-60°	621.5	89.7
0°-90°	692.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	692.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	383	383	383	383	383	
5°	379	382	378	376	378	36
15°	360	357	343	336	334	101
25°	326	315	288	271	264	150
35°	280	261	222	195	185	175
45°	228	201	152	121	112	176
55°	172	138	85	59	52	154
65°	114	74	31	23	21	112
75°	55	21	8	7	7	58
85°	8	2	2	1	1	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	383.3	383.3	383.3	383.3	383.3
2.5°	380.4	384.3	381.1	381.5	381.8
5°	378.6	381.5	377.6	376.5	378.3
7.5°	375.8	377.9	371.2	368.7	369.8
10°	371.5	372.3	363.0	359.5	359.1
12.5°	366.2	365.2	353.8	348.1	347.8
15°	360.2	357.0	343.2	335.7	333.9
17.5°	352.7	347.8	330.7	321.2	318.3
20°	344.2	337.5	318.0	305.5	300.9
22.5°	335.7	326.5	303.8	288.2	283.2
25°	325.8	314.8	288.5	270.8	264.0
27.5°	315.1	302.0	272.9	252.3	244.1
30°	304.1	288.9	256.6	233.5	224.6
32.5°	292.4	275.0	239.5	214.3	205.1
35°	280.0	260.8	222.1	195.2	184.9
37.5°	267.6	246.3	205.1	176.4	165.7
40°	254.4	231.4	186.7	157.2	146.2
42.5°	241.7	216.1	169.3	139.1	129.2
45°	228.2	200.9	151.9	121.4	111.8
47.5°	214.3	184.9	134.5	104.7	95.1
50°	200.1	169.3	117.5	88.4	79.8
52.5°	185.9	153.7	101.5	72.7	65.3
55°	171.8	137.7	85.2	58.9	51.8
57.5°	157.6	122.1	69.9	46.1	39.7
60°	143.0	106.1	55.4	34.1	32.3
62.5°	128.5	90.5	42.9	28.0	26.6
65°	113.6	74.5	30.9	22.7	21.3
67.5°	98.7	60.0	22.4	17.4	16.3
70°	83.0	45.8	17.4	13.1	12.1
72.5°	68.1	33.0	12.4	9.6	9.2
75°	54.6	21.3	8.5	7.1	7.1
77.5°	41.2	12.8	6.0	5.3	5.3
80°	28.7	7.5	4.3	3.9	3.9
82.5°	17.4	3.9	2.8	2.5	2.5
85°	7.5	2.1	1.8	1.4	1.4
87.5°	1.4	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	14.63	16.07	14.99	16.38	16.70	7.26	8.70	7.62	9.02	9.33
	3H	16.18	17.47	16.56	17.80	18.16	7.82	9.11	8.20	9.44	9.80
	4H	16.71	17.91	17.11	18.26	18.64	7.95	9.15	8.35	9.50	9.88
	6H	17.04	18.15	17.46	18.52	18.91	8.01	9.12	8.42	9.49	9.88
	8H	17.13	18.18	17.55	18.57	18.97	8.02	9.07	8.44	9.46	9.86
	12H	17.15	18.16	17.58	18.54	18.97	8.01	9.01	8.44	9.39	9.82
4H	2H	14.52	15.72	14.92	16.07	16.45	7.82	9.03	8.23	9.38	9.76
	3H	16.19	17.18	16.60	17.58	17.98	8.50	9.48	8.91	9.89	10.29
	4H	16.74	17.62	17.17	18.04	18.48	8.65	9.54	9.09	9.96	10.40
	6H	17.13	17.89	17.59	18.34	18.80	8.77	9.53	9.22	9.97	10.44
	8H	17.24	17.95	17.70	18.39	18.86	8.78	9.49	9.24	9.94	10.41
	12H	17.28	17.92	17.77	18.40	18.87	8.78	9.41	9.26	9.89	10.37
8H	4H	16.64	17.35	17.11	17.80	18.27	8.92	9.64	9.39	10.08	10.55
	6H	17.03	17.61	17.53	18.11	18.59	9.06	9.64	9.56	10.14	10.61
	8H	17.14	17.66	17.65	18.17	18.66	9.09	9.61	9.60	10.12	10.61
	12H	17.20	17.66	17.71	18.16	18.72	9.11	9.57	9.62	10.06	10.63
12H	4H	16.60	17.24	17.09	17.72	18.19	8.94	9.57	9.42	10.05	10.53
	6H	16.97	17.50	17.49	18.01	18.50	9.07	9.59	9.59	10.11	10.60
	8H	17.10	17.57	17.62	18.06	18.63	9.13	9.59	9.64	10.09	10.65