

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: P1056570

Luminaire Tested: S125R3DR-H375D940-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056570
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-H375D940-X4F0-XX-UDD-F-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

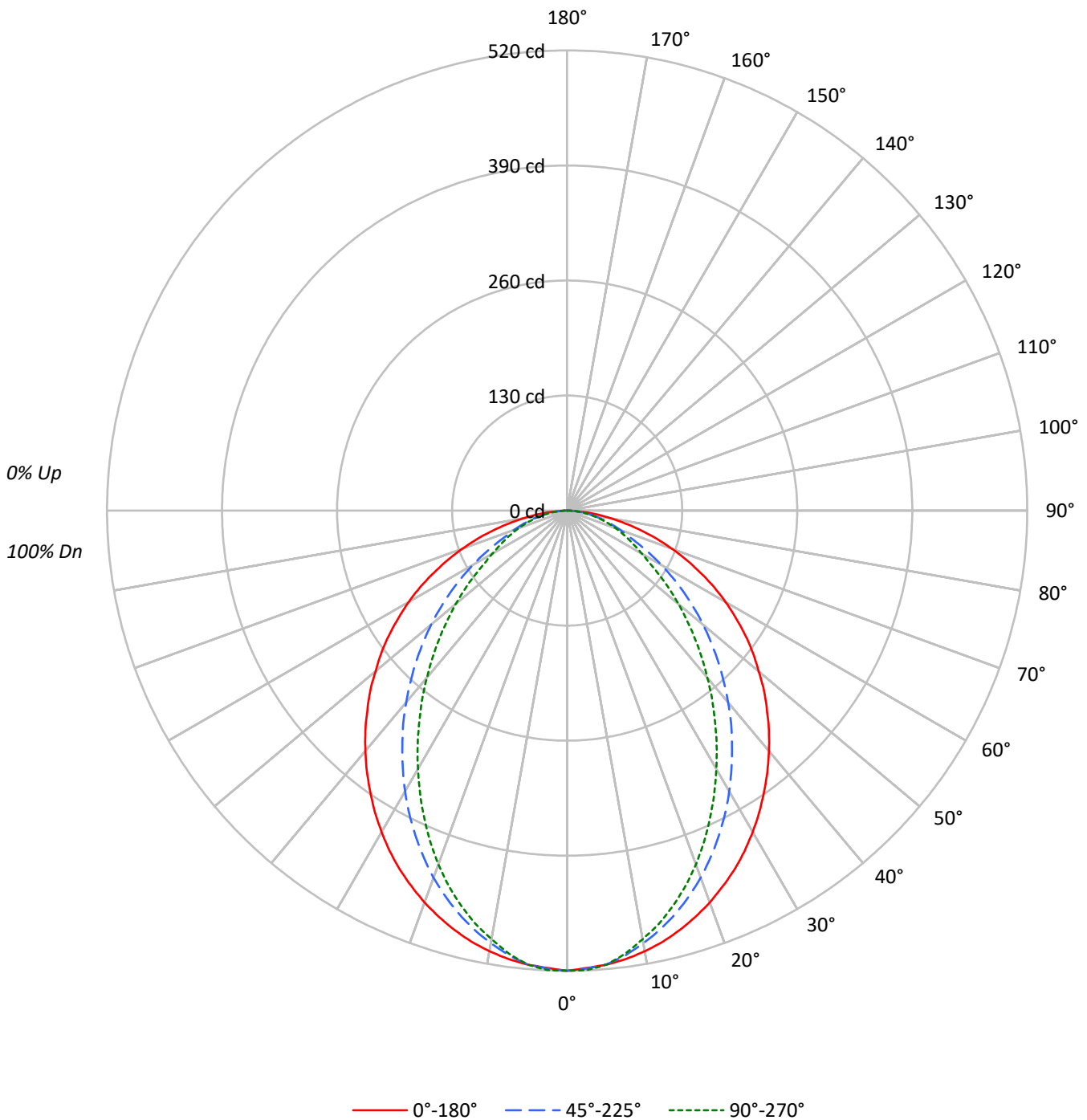
Lumens per Lamp: N/A
Luminaire Lumens: 1102.1 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
Input Voltage (V): 120
Input Current (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	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	30	42	35	30	41	35	30	40	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3676	3676	3676
5°	3654	3652	3654
10°	3629	3563	3530
15°	3593	3454	3383
20°	3545	3321	3201
25°	3491	3162	2984
30°	3423	2990	2753
35°	3348	2803	2513
40°	3273	2612	2276
45°	3193	2411	2040
50°	3108	2206	1806
55°	3031	1981	1570
60°	2924	1740	1380
65°	2778	1477	1283
70°	2608	1321	1201
75°	2357	1215	1131
80°	2048	1103	1054
85°	1598	973	973

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3193 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.7	4.4
10°-20°	133.6	12.1
20°-30°	188.7	17.1
30°-40°	207.7	18.8
40°-50°	193.8	17.6
50°-60°	154.7	14.0
60°-70°	104.1	9.4
70°-80°	55.4	5.0
80°-90°	15.4	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°	370.9	33.7
0°-40°	578.7	52.5
0°-60°	927.1	84.1
0°-90°	1102.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1102.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	520	520	520	520	520	
5°	515	519	515	513	515	49
15°	491	488	472	464	462	138
25°	448	434	405	388	382	206
35°	388	365	325	299	291	243
45°	319	289	241	212	204	247
55°	246	209	161	135	127	219
65°	166	130	88	78	77	165
75°	86	57	44	42	41	92
85°	20	14	12	12	12	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	520.0	520.0	520.0	520.0	520.0
2.5°	517.3	521.5	518.0	518.8	519.6
5°	514.9	519.2	514.6	513.0	514.9
7.5°	511.1	514.6	506.8	503.3	504.9
10°	505.6	508.0	496.4	491.7	491.7
12.5°	499.1	499.1	485.1	478.5	478.5
15°	490.9	488.2	472.0	463.8	462.3
17.5°	481.6	476.6	457.3	446.8	444.9
20°	471.2	463.1	441.4	427.8	425.5
22.5°	459.6	449.1	424.0	407.3	404.6
25°	447.6	434.0	405.4	387.6	382.5
27.5°	434.0	417.8	386.4	366.3	360.1
30°	419.3	400.7	366.3	343.8	337.2
32.5°	404.2	383.3	345.7	321.7	314.4
35°	387.9	365.1	324.8	299.3	291.2
37.5°	371.7	346.9	304.3	277.6	269.1
40°	354.7	327.5	283.0	255.5	246.6
42.5°	337.6	308.6	262.1	234.2	224.9
45°	319.4	289.2	241.2	211.8	204.0
47.5°	302.0	269.5	220.7	192.0	183.5
50°	282.6	249.0	200.6	171.9	164.2
52.5°	264.8	228.8	180.4	153.7	145.6
55°	245.9	208.7	160.7	135.1	127.4
57.5°	226.1	188.6	141.7	117.7	110.3
60°	206.8	168.4	123.1	101.1	97.6
62.5°	187.0	149.4	105.7	88.7	86.3
65°	166.1	129.7	88.3	78.2	76.7
67.5°	146.4	110.7	74.3	68.5	67.0
70°	126.2	91.8	63.9	58.9	58.1
72.5°	106.5	73.6	53.8	50.3	49.6
75°	86.3	57.3	44.5	41.8	41.4
77.5°	67.8	43.0	35.2	34.1	33.3
80°	50.3	32.1	27.1	26.3	25.9
82.5°	34.5	22.1	19.4	19.4	18.6
85°	19.7	13.6	12.0	12.4	12.0
87.5°	7.4	5.8	5.4	5.8	5.8
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	15.81	17.35	16.18	17.67	17.98	12.19	13.73	12.56	14.05	14.36
	3H	17.60	18.98	17.98	19.31	19.67	13.67	15.05	14.05	15.38	15.74
	4H	18.25	19.55	18.65	19.90	20.28	14.26	15.56	14.66	15.91	16.29
	6H	18.73	19.93	19.14	20.29	20.69	14.72	15.92	15.13	16.29	16.68
	8H	18.88	20.03	19.31	20.41	20.82	14.88	16.03	15.31	16.42	16.82
	12H	18.98	20.07	19.41	20.45	20.88	15.00	16.09	15.43	16.47	16.90
4H	2H	15.95	17.25	16.35	17.59	17.97	12.87	14.17	13.27	14.52	14.90
	3H	17.92	19.00	18.33	19.40	19.80	14.55	15.63	14.96	16.03	16.43
	4H	18.66	19.64	19.09	20.05	20.49	15.25	16.22	15.68	16.64	17.08
	6H	19.26	20.10	19.71	20.55	21.01	15.84	16.68	16.29	17.13	17.59
	8H	19.46	20.26	19.93	20.70	21.17	16.04	16.84	16.51	17.28	17.75
	12H	19.61	20.32	20.09	20.80	21.27	16.21	16.91	16.69	17.39	17.86
8H	4H	18.73	19.52	19.19	19.96	20.43	15.61	16.41	16.08	16.85	17.32
	6H	19.38	20.04	19.88	20.53	21.01	16.32	16.97	16.81	17.46	17.94
	8H	19.64	20.23	20.15	20.74	21.22	16.60	17.19	17.11	17.70	18.19
	12H	19.85	20.37	20.36	20.86	21.42	16.84	17.36	17.35	17.86	18.42
12H	4H	18.72	19.43	19.20	19.91	20.38	15.66	16.37	16.14	16.85	17.32
	6H	19.38	19.97	19.89	20.48	20.97	16.39	16.98	16.90	17.49	17.97
	8H	19.67	20.19	20.18	20.69	21.25	16.73	17.25	17.24	17.74	18.31