

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: P1056403

Luminaire Tested: S125R3DR-S1270D935-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056403
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-S1270D935-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

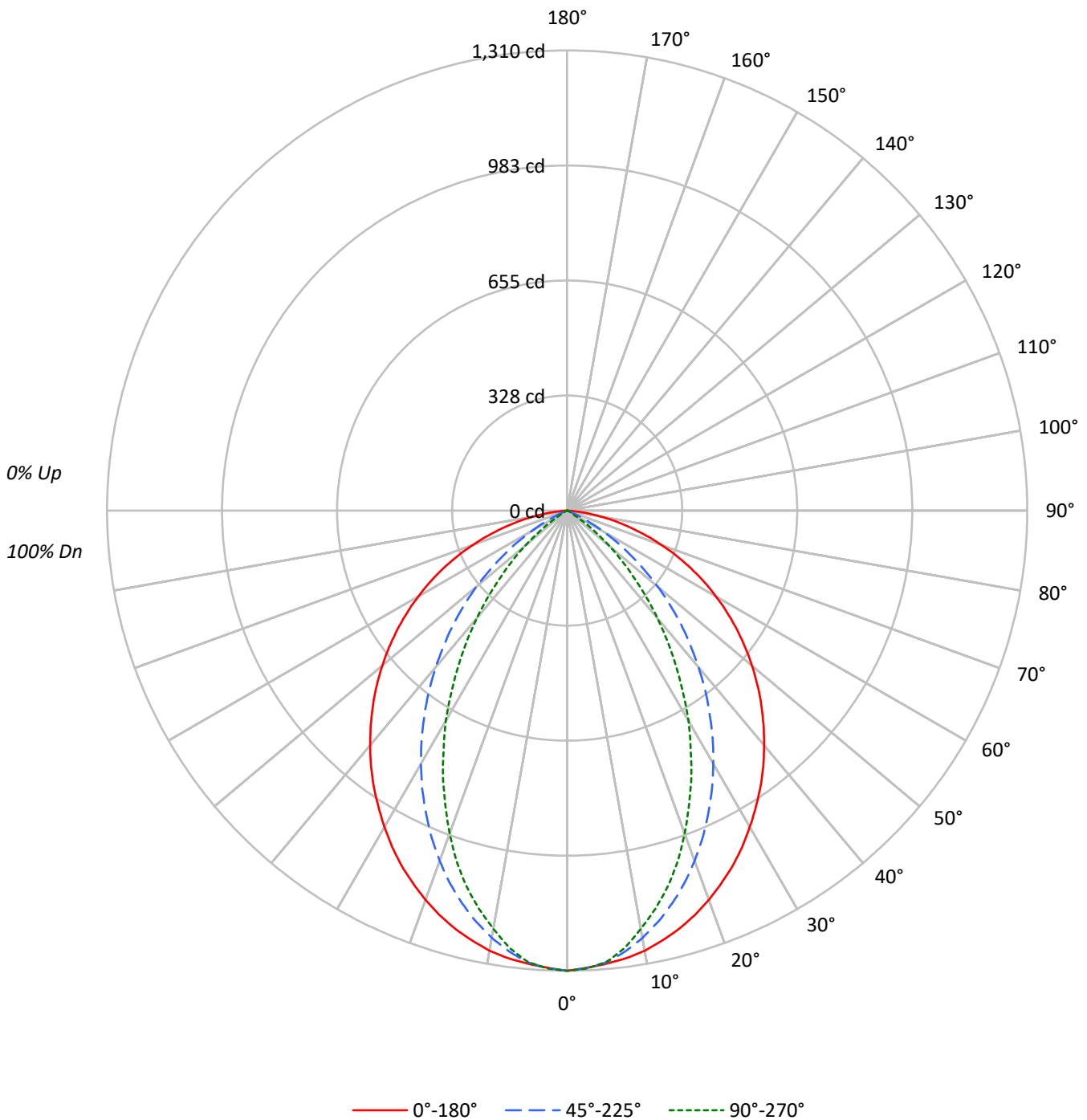
Lumens per Lamp: N/A
Luminaire Lumens: 2123.7 lumens
Efficiency: N/A
Efficacy: 50.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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	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°	9262	9262	9262
5°	9187	9159	9150
10°	9135	8865	8678
15°	9019	8468	8106
20°	8870	7981	7356
25°	8700	7414	6522
30°	8490	6795	5639
35°	8281	6107	4662
40°	8053	5368	3690
45°	7815	4583	2674
50°	7554	3699	1728
55°	7266	2704	768
60°	6921	1671	221
65°	6495	609	130
70°	5878	215	54
75°	5108	71	36
80°	3912	53	0
85°	1793	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7815 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.7	5.7
10°-20°	326.8	15.4
20°-30°	442.1	20.8
30°-40°	454.1	21.4
40°-50°	376.2	17.7
50°-60°	241.5	11.4
60°-70°	116.7	5.5
70°-80°	39.5	1.9
80°-90°	5.1	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°	890.5	41.9
0°-40°	1344.7	63.3
0°-60°	1962.4	92.4
0°-90°	2123.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2123.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1310	1310	1310	1310	1310	
5°	1295	1305	1291	1283	1289	123
15°	1232	1217	1157	1117	1108	347
25°	1115	1061	950	865	836	513
35°	960	867	708	584	540	600
45°	782	653	458	317	268	603
55°	590	432	219	96	62	527
65°	388	214	36	10	8	384
75°	187	40	3	1	1	198
85°	22	0	0	0	0	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1310.2	1310.2	1310.2	1310.2	1310.2
2.5°	1302.4	1312.8	1303.7	1302.4	1305.0
5°	1294.6	1305.0	1290.7	1282.9	1289.4
7.5°	1285.5	1290.7	1266.1	1253.1	1255.7
10°	1272.5	1271.3	1234.9	1212.8	1208.9
12.5°	1253.1	1246.6	1198.5	1167.4	1160.9
15°	1232.3	1216.7	1157.0	1116.7	1107.6
17.5°	1207.6	1183.0	1111.5	1059.6	1046.6
20°	1179.1	1145.3	1060.9	997.3	977.8
22.5°	1147.9	1105.0	1007.7	932.3	906.4
25°	1115.4	1060.9	950.5	864.8	836.2
27.5°	1079.1	1015.4	893.4	796.0	760.9
30°	1040.1	967.4	832.4	725.9	690.8
32.5°	999.9	919.4	771.3	655.8	612.9
35°	959.6	867.4	707.7	584.3	540.2
37.5°	916.8	815.5	645.4	516.8	468.8
40°	872.6	762.2	581.7	446.7	399.9
42.5°	827.2	707.7	518.1	380.5	332.4
45°	781.7	653.2	458.4	316.8	267.5
47.5°	735.0	597.3	396.0	254.5	211.7
50°	686.9	542.8	336.3	198.7	157.1
52.5°	638.9	486.9	275.3	144.1	106.5
55°	589.5	432.4	219.4	96.1	62.3
57.5°	540.2	376.6	167.5	53.2	23.4
60°	489.5	323.3	118.2	18.2	15.6
62.5°	440.2	266.2	74.0	14.3	11.7
65°	388.3	214.3	36.4	10.4	7.8
67.5°	337.6	164.9	15.6	6.5	3.9
70°	284.4	119.5	10.4	3.9	2.6
72.5°	235.0	76.6	6.5	2.6	1.3
75°	187.0	40.3	2.6	1.3	1.3
77.5°	140.2	16.9	1.3	1.3	1.3
80°	96.1	7.8	1.3	1.3	0.0
82.5°	57.1	2.6	1.3	1.3	0.0
85°	22.1	0.0	0.0	0.0	0.0
87.5°	1.3	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	18.80	20.19	19.17	20.50	20.81	3.66	5.05	4.03	5.36	5.68
	3H	20.35	21.58	20.73	21.91	22.27	3.59	4.81	3.96	5.14	5.51
	4H	20.88	22.02	21.28	22.37	22.75	3.52	4.66	3.92	5.01	5.40
	6H	21.21	22.27	21.63	22.63	23.03	3.45	4.50	3.86	4.87	5.26
	8H	21.30	22.29	21.72	22.68	23.09	3.41	4.41	3.84	4.80	5.20
	12H	21.31	22.27	21.74	22.65	23.08	3.37	4.32	3.80	4.70	5.13
4H	2H	18.61	19.75	19.01	20.10	20.48	4.53	5.67	4.93	6.02	6.41
	3H	20.22	21.15	20.63	21.56	21.96	4.48	5.41	4.89	5.82	6.22
	4H	20.74	21.58	21.18	21.99	22.44	4.40	5.24	4.84	5.65	6.10
	6H	21.12	21.84	21.58	22.28	22.75	4.34	5.06	4.80	5.50	5.97
	8H	21.22	21.89	21.68	22.33	22.80	4.29	4.96	4.75	5.40	5.87
	12H	21.25	21.84	21.74	22.33	22.80	4.24	4.84	4.73	5.32	5.79
8H	4H	20.61	21.29	21.08	21.73	22.20	5.42	6.10	5.89	6.54	7.01
	6H	20.97	21.52	21.47	22.01	22.49	5.34	5.89	5.84	6.39	6.87
	8H	21.06	21.56	21.58	22.07	22.56	5.29	5.78	5.81	6.30	6.79
	12H	21.11	21.54	21.62	22.04	22.61	5.25	5.68	5.76	6.18	6.75
12H	4H	20.57	21.17	21.06	21.65	22.12	5.50	6.10	5.99	6.58	7.05
	6H	20.91	21.40	21.43	21.92	22.41	5.40	5.90	5.93	6.41	6.90
	8H	21.02	21.46	21.54	21.95	22.52	5.37	5.81	5.89	6.30	6.87