

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: P1056398

Luminaire Tested: S125R3DR-S1270D927-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056398
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-S1270D927-X4F0-XX-UDD-F-S
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

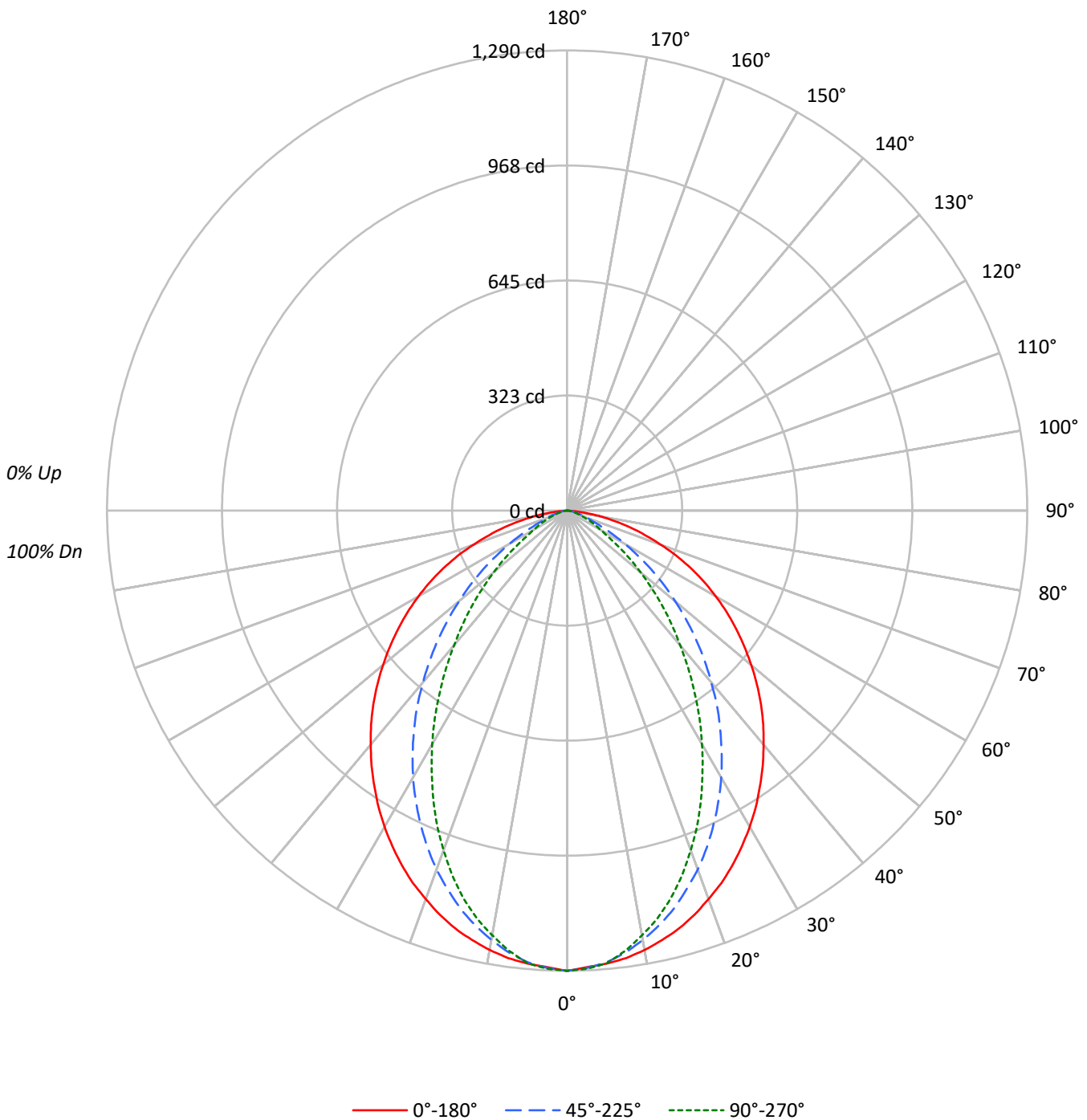
Lumens per Lamp: N/A
Luminaire Lumens: 2332.1 lumens
Efficiency: N/A
Efficacy: 55.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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									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°	9122	9122	9122
5°	9046	9021	9038
10°	8979	8773	8679
15°	8875	8455	8228
20°	8718	8053	7622
25°	8555	7576	6934
30°	8358	7051	6174
35°	8135	6454	5372
40°	7905	5799	4542
45°	7680	5112	3762
50°	7410	4350	2956
55°	7126	3534	2149
60°	6808	2635	1537
65°	6395	1738	1199
70°	5779	1209	839
75°	5026	784	653
80°	3941	582	533
85°	2036	487	389

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7680 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	5.2
10°-20°	326.7	14.0
20°-30°	451.8	19.4
30°-40°	478.7	20.5
40°-50°	417.8	17.9
50°-60°	297.2	12.7
60°-70°	165.2	7.1
70°-80°	63.5	2.7
80°-90°	11.0	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°	898.7	38.5
0°-40°	1377.4	59.1
0°-60°	2092.3	89.7
0°-90°	2332.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2332.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1290	1290	1290	1290	1290	
5°	1275	1284	1271	1268	1274	121
15°	1213	1202	1155	1130	1124	342
25°	1097	1060	971	912	889	505
35°	943	878	748	657	622	590
45°	768	676	511	409	376	592
55°	578	464	287	198	174	517
65°	382	251	104	76	72	378
75°	184	72	29	24	24	195
85°	25	7	6	5	5	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1290.3	1290.3	1290.3	1290.3	1290.3
2.5°	1280.8	1293.9	1283.1	1284.3	1285.5
5°	1274.8	1284.3	1271.2	1267.6	1273.6
7.5°	1265.2	1272.4	1249.7	1241.3	1244.9
10°	1250.9	1253.3	1222.2	1210.3	1209.1
12.5°	1233.0	1229.4	1191.1	1172.0	1170.8
15°	1212.7	1201.9	1155.3	1130.2	1124.2
17.5°	1187.6	1170.8	1113.5	1081.2	1071.7
20°	1158.9	1136.2	1070.5	1028.7	1013.1
22.5°	1130.2	1099.2	1022.7	970.1	953.4
25°	1096.8	1059.7	971.3	911.6	888.9
27.5°	1060.9	1016.7	918.7	849.5	822.0
30°	1023.9	972.5	863.8	786.1	756.3
32.5°	984.5	925.9	806.4	721.6	690.6
35°	942.6	878.1	747.9	657.1	622.5
37.5°	900.8	829.1	690.6	593.8	557.9
40°	856.6	779.0	628.4	529.3	492.2
42.5°	813.6	727.6	569.9	468.3	434.9
45°	768.2	676.2	511.3	408.6	376.3
47.5°	721.6	622.5	452.8	352.4	320.2
50°	673.8	569.9	395.5	297.5	268.8
52.5°	626.0	517.3	341.7	244.9	219.8
55°	578.2	463.6	286.7	198.3	174.4
57.5°	530.5	411.0	235.4	155.3	133.8
60°	481.5	357.2	186.4	114.7	108.7
62.5°	432.5	304.7	144.6	94.4	89.6
65°	382.3	250.9	103.9	76.5	71.7
67.5°	332.1	201.9	75.3	58.5	55.0
70°	279.6	154.1	58.5	44.2	40.6
72.5°	229.4	111.1	41.8	32.3	31.1
75°	184.0	71.7	28.7	23.9	23.9
77.5°	138.6	43.0	20.3	17.9	17.9
80°	96.8	25.1	14.3	13.1	13.1
82.5°	58.5	13.1	9.6	8.4	8.4
85°	25.1	7.2	6.0	4.8	4.8
87.5°	4.8	2.4	2.4	2.4	2.4
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	18.84	20.29	19.21	20.60	20.92	11.48	12.92	11.84	13.24	13.55
	3H	20.40	21.69	20.78	22.02	22.38	12.04	13.33	12.42	13.66	14.02
	4H	20.92	22.12	21.32	22.47	22.85	12.17	13.37	12.57	13.72	14.10
	6H	21.26	22.37	21.67	22.74	23.13	12.23	13.34	12.65	13.71	14.10
	8H	21.34	22.39	21.77	22.78	23.19	12.24	13.29	12.66	13.68	14.08
	12H	21.37	22.37	21.80	22.75	23.18	12.23	13.23	12.66	13.62	14.05
4H	2H	18.74	19.94	19.14	20.29	20.67	12.04	13.25	12.44	13.60	13.98
	3H	20.41	21.39	20.82	21.79	22.20	12.72	13.70	13.13	14.11	14.51
	4H	20.95	21.84	21.39	22.25	22.70	12.87	13.76	13.31	14.17	14.62
	6H	21.35	22.11	21.81	22.56	23.02	12.99	13.75	13.44	14.19	14.66
	8H	21.45	22.16	21.92	22.61	23.08	13.00	13.71	13.46	14.16	14.62
	12H	21.50	22.13	21.98	22.61	23.09	13.00	13.63	13.48	14.11	14.59
8H	4H	20.86	21.57	21.32	22.02	22.49	13.14	13.86	13.61	14.30	14.77
	6H	21.24	21.83	21.74	22.32	22.80	13.28	13.86	13.78	14.36	14.83
	8H	21.35	21.88	21.87	22.39	22.88	13.30	13.83	13.82	14.34	14.83
	12H	21.42	21.88	21.93	22.37	22.94	13.33	13.79	13.84	14.28	14.85
12H	4H	20.82	21.45	21.31	21.94	22.41	13.16	13.79	13.64	14.27	14.75
	6H	21.19	21.72	21.71	22.23	22.72	13.29	13.81	13.81	14.33	14.82
	8H	21.32	21.78	21.83	22.28	22.84	13.35	13.81	13.86	14.30	14.87