

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: P1056371

Luminaire Tested: S125R3DR-S1090D927-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056371
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-S1090D927-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

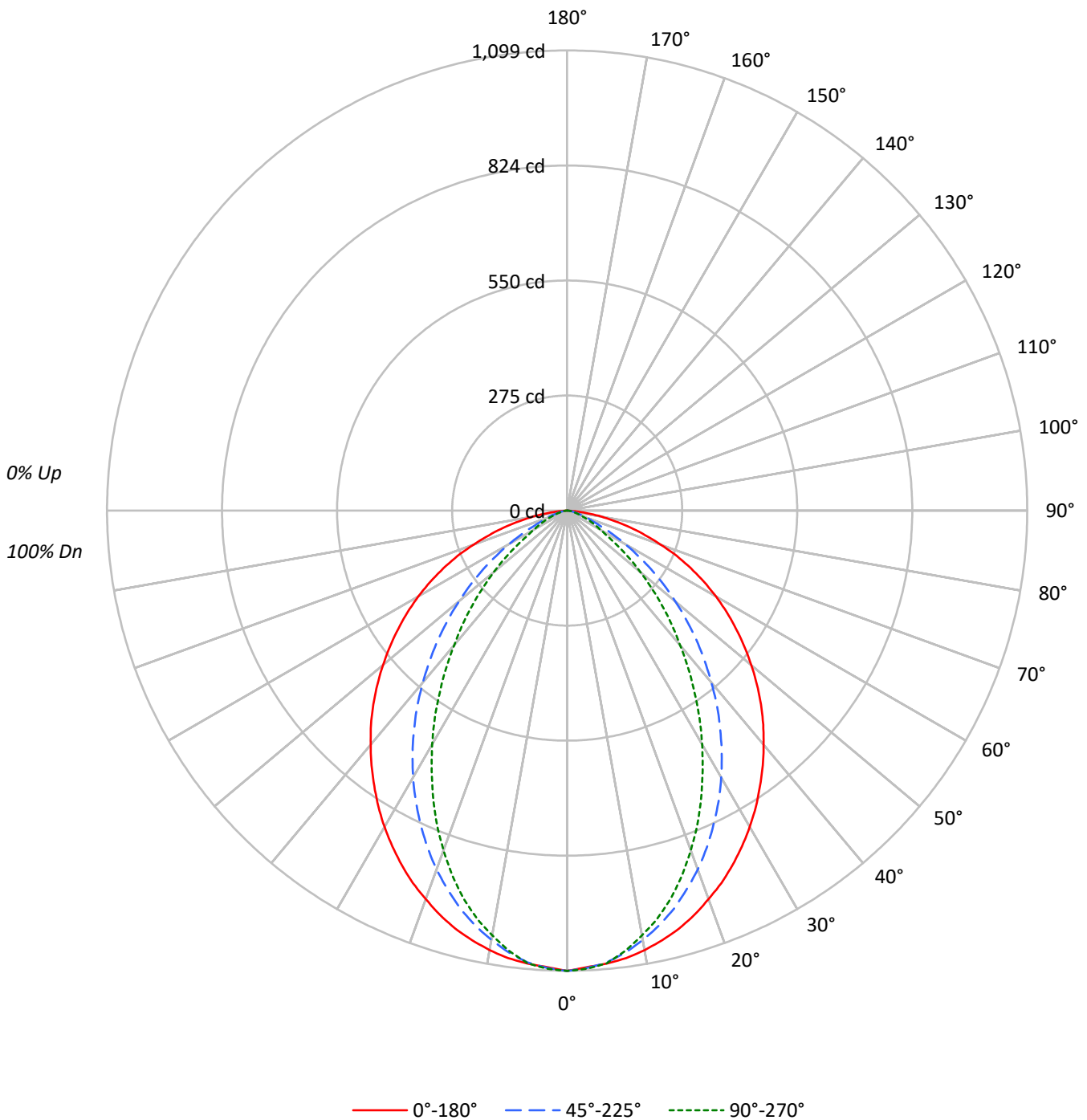
Lumens per Lamp: N/A
Luminaire Lumens: 1987.2 lumens
Efficiency: N/A
Efficacy: 57.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7772	7772	7772
5°	7708	7687	7701
10°	7651	7476	7395
15°	7562	7205	7011
20°	7429	6862	6495
25°	7289	6455	5908
30°	7121	6008	5260
35°	6932	5500	4577
40°	6736	4942	3870
45°	6544	4356	3206
50°	6315	3706	2520
55°	6073	3011	1831
60°	5801	2245	1309
65°	5450	1482	1022
70°	4923	1031	715
75°	4283	666	557
80°	3359	497	456
85°	1736	414	333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6544 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	5.2
10°-20°	278.4	14.0
20°-30°	385.0	19.4
30°-40°	407.9	20.5
40°-50°	356.0	17.9
50°-60°	253.2	12.7
60°-70°	140.8	7.1
70°-80°	54.1	2.7
80°-90°	9.4	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°	765.8	38.5
0°-40°	1173.6	59.1
0°-60°	1782.8	89.7
0°-90°	1987.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1987.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1099	1099	1099	1099	1099	
5°	1086	1094	1083	1080	1085	103
15°	1033	1024	984	963	958	291
25°	934	903	828	777	757	430
35°	803	748	637	560	530	503
45°	655	576	436	348	321	505
55°	493	395	244	169	149	441
65°	326	214	89	65	61	322
75°	157	61	24	20	20	166
85°	21	6	5	4	4	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1099.4	1099.4	1099.4	1099.4	1099.4
2.5°	1091.3	1102.5	1093.3	1094.4	1095.4
5°	1086.2	1094.4	1083.2	1080.1	1085.2
7.5°	1078.1	1084.2	1064.8	1057.7	1060.8
10°	1065.9	1067.9	1041.4	1031.2	1030.2
12.5°	1050.6	1047.5	1014.9	998.7	997.6
15°	1033.3	1024.1	984.4	963.0	957.9
17.5°	1011.9	997.6	948.8	921.3	913.1
20°	987.5	968.1	912.1	876.5	863.3
22.5°	963.0	936.6	871.4	826.6	812.4
25°	934.5	903.0	827.6	776.7	757.4
27.5°	904.0	866.3	782.8	723.8	700.4
30°	872.4	828.7	736.0	669.8	644.4
32.5°	838.8	789.0	687.2	614.9	588.4
35°	803.2	748.2	637.3	559.9	530.4
37.5°	767.6	706.5	588.4	505.9	475.4
40°	729.9	663.7	535.5	451.0	419.4
42.5°	693.3	620.0	485.6	399.1	370.6
45°	654.6	576.2	435.7	348.2	320.7
47.5°	614.9	530.4	385.8	300.3	272.8
50°	574.2	485.6	337.0	253.5	229.1
52.5°	533.4	440.8	291.1	208.7	187.3
55°	492.7	395.0	244.3	169.0	148.6
57.5°	452.0	350.2	200.5	132.3	114.0
60°	410.3	304.4	158.8	97.7	92.6
62.5°	368.5	259.6	123.2	80.4	76.4
65°	325.8	213.8	88.6	65.2	61.1
67.5°	283.0	172.0	64.1	49.9	46.8
70°	238.2	131.3	49.9	37.7	34.6
72.5°	195.5	94.7	35.6	27.5	26.5
75°	156.8	61.1	24.4	20.4	20.4
77.5°	118.1	36.6	17.3	15.3	15.3
80°	82.5	21.4	12.2	11.2	11.2
82.5°	49.9	11.2	8.1	7.1	7.1
85°	21.4	6.1	5.1	4.1	4.1
87.5°	4.1	2.0	2.0	2.0	2.0
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	18.29	19.73	18.65	20.04	20.36	10.92	12.37	11.29	12.68	12.99
	3H	19.84	21.13	20.22	21.46	21.82	11.49	12.77	11.86	13.10	13.46
	4H	20.37	21.57	20.77	21.92	22.30	11.61	12.81	12.01	13.16	13.54
	6H	20.70	21.81	21.12	22.18	22.57	11.68	12.78	12.09	13.15	13.54
	8H	20.79	21.84	21.21	22.23	22.63	11.68	12.73	12.11	13.12	13.53
	12H	20.81	21.82	21.24	22.20	22.63	11.67	12.68	12.10	13.06	13.49
4H	2H	18.18	19.38	18.58	19.73	20.11	11.49	12.69	11.89	13.04	13.42
	3H	19.85	20.84	20.26	21.24	21.64	12.16	13.15	12.57	13.55	13.95
	4H	20.40	21.28	20.83	21.70	22.14	12.32	13.20	12.75	13.62	14.06
	6H	20.79	21.56	21.25	22.00	22.46	12.43	13.19	12.89	13.64	14.10
	8H	20.90	21.61	21.36	22.05	22.52	12.44	13.16	12.91	13.60	14.07
	12H	20.94	21.58	21.43	22.06	22.53	12.44	13.08	12.93	13.56	14.03
8H	4H	20.30	21.01	20.77	21.46	21.93	12.59	13.30	13.05	13.75	14.22
	6H	20.69	21.27	21.19	21.77	22.25	12.72	13.31	13.22	13.80	14.28
	8H	20.80	21.32	21.31	21.83	22.32	12.75	13.27	13.27	13.79	14.28
	12H	20.86	21.32	21.37	21.82	22.38	12.77	13.24	13.28	13.73	14.30
12H	4H	20.27	20.90	20.75	21.38	21.85	12.60	13.24	13.09	13.72	14.19
	6H	20.64	21.16	21.15	21.67	22.16	12.73	13.26	13.25	13.77	14.26
	8H	20.76	21.23	21.28	21.72	22.29	12.79	13.26	13.30	13.75	14.32