

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: P1056376

Luminaire Tested: S125R3DR-S1090D935-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056376
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-S1090D935-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

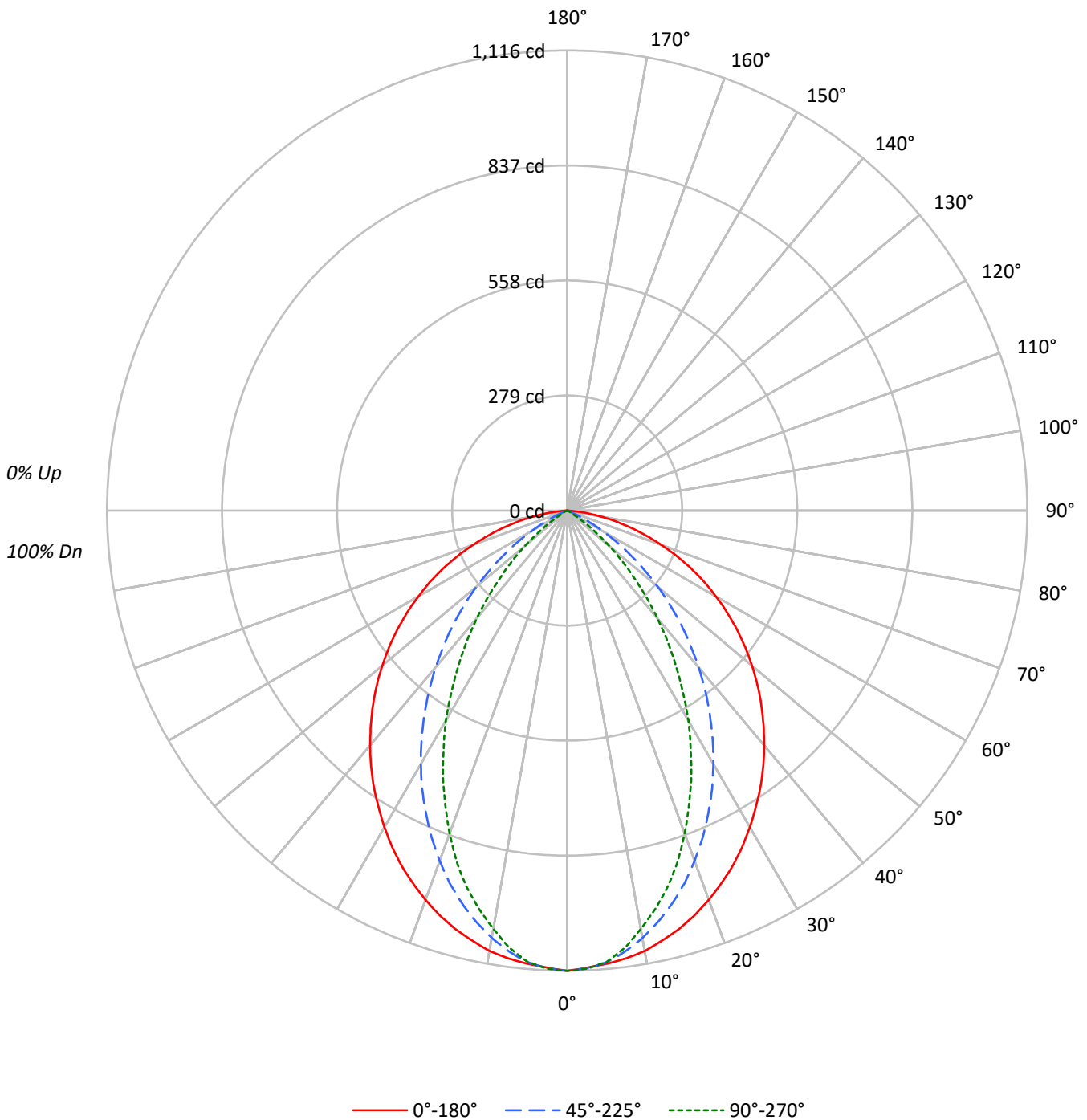
Lumens per Lamp: N/A
Luminaire Lumens: 1809.5 lumens
Efficiency: N/A
Efficacy: 52.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	7892	7892	7892
5°	7828	7805	7797
10°	7784	7553	7394
15°	7685	7215	6907
20°	7558	6801	6267
25°	7413	6317	5558
30°	7235	5789	4805
35°	7057	5204	3972
40°	6861	4575	3145
45°	6659	3905	2278
50°	6437	3152	1473
55°	6191	2305	654
60°	5897	1424	188
65°	5533	519	110
70°	5008	184	45
75°	4351	60	30
80°	3334	45	0
85°	1525	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6659 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.7	5.7
10°-20°	278.4	15.4
20°-30°	376.7	20.8
30°-40°	387.0	21.4
40°-50°	320.6	17.7
50°-60°	205.8	11.4
60°-70°	99.4	5.5
70°-80°	33.6	1.9
80°-90°	4.3	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°	758.8	41.9
0°-40°	1145.7	63.3
0°-60°	1672.1	92.4
0°-90°	1809.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1809.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1103	1112	1100	1093	1099	105
15°	1050	1037	986	952	944	296
25°	950	904	810	737	712	437
35°	818	739	603	498	460	511
45°	666	556	391	270	228	514
55°	502	368	187	82	53	449
65°	331	183	31	9	7	327
75°	159	34	2	1	1	169
85°	19	0	0	0	0	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1116.4	1116.4	1116.4	1116.4	1116.4
2.5°	1109.8	1118.6	1110.9	1109.8	1112.0
5°	1103.1	1112.0	1099.8	1093.2	1098.7
7.5°	1095.4	1099.8	1078.8	1067.7	1069.9
10°	1084.3	1083.2	1052.2	1033.4	1030.1
12.5°	1067.7	1062.2	1021.2	994.7	989.2
15°	1050.0	1036.7	985.8	951.5	943.8
17.5°	1029.0	1008.0	947.1	902.9	891.8
20°	1004.6	975.9	904.0	849.7	833.1
22.5°	978.1	941.6	858.6	794.4	772.3
25°	950.4	904.0	809.9	736.9	712.5
27.5°	919.5	865.2	761.2	678.2	648.4
30°	886.3	824.3	709.2	618.5	588.6
32.5°	852.0	783.4	657.2	558.8	522.2
35°	817.7	739.1	603.0	497.9	460.3
37.5°	781.1	694.8	549.9	440.4	399.4
40°	743.5	649.5	495.7	380.6	340.8
42.5°	704.8	603.0	441.5	324.2	283.2
45°	666.1	556.5	390.6	270.0	227.9
47.5°	626.2	509.0	337.5	216.9	180.3
50°	585.3	462.5	286.6	169.3	133.9
52.5°	544.4	414.9	234.6	122.8	90.7
55°	502.3	368.4	187.0	81.9	53.1
57.5°	460.3	320.9	142.7	45.4	19.9
60°	417.1	275.5	100.7	15.5	13.3
62.5°	375.1	226.8	63.1	12.2	10.0
65°	330.8	182.6	31.0	8.9	6.6
67.5°	287.7	140.5	13.3	5.5	3.3
70°	242.3	101.8	8.9	3.3	2.2
72.5°	200.3	65.3	5.5	2.2	1.1
75°	159.3	34.3	2.2	1.1	1.1
77.5°	119.5	14.4	1.1	1.1	1.1
80°	81.9	6.6	1.1	1.1	0.0
82.5°	48.7	2.2	1.1	1.1	0.0
85°	18.8	0.0	0.0	0.0	0.0
87.5°	1.1	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	18.25	19.63	18.61	19.94	20.26	3.12	4.50	3.48	4.81	5.13
	3H	19.80	21.02	20.18	21.35	21.72	3.04	4.26	3.42	4.59	4.96
	4H	20.32	21.46	20.72	21.81	22.20	2.97	4.11	3.37	4.46	4.85
	6H	20.66	21.71	21.07	22.08	22.47	2.90	3.95	3.31	4.32	4.71
	8H	20.74	21.74	21.17	22.13	22.53	2.86	3.86	3.29	4.25	4.65
	12H	20.76	21.71	21.19	22.09	22.52	2.82	3.77	3.25	4.15	4.58
4H	2H	18.05	19.19	18.45	19.54	19.93	3.98	5.12	4.38	5.47	5.86
	3H	19.66	20.60	20.08	21.00	21.40	3.93	4.86	4.34	5.26	5.67
	4H	20.19	21.02	20.62	21.44	21.88	3.85	4.68	4.28	5.10	5.54
	6H	20.56	21.28	21.02	21.73	22.19	3.78	4.50	4.25	4.95	5.41
	8H	20.66	21.33	21.13	21.78	22.25	3.73	4.40	4.20	4.85	5.32
	12H	20.69	21.29	21.18	21.77	22.24	3.69	4.28	4.18	4.77	5.24
8H	4H	20.06	20.73	20.53	21.18	21.65	4.87	5.54	5.34	5.99	6.46
	6H	20.41	20.96	20.91	21.46	21.94	4.79	5.34	5.29	5.83	6.31
	8H	20.51	21.00	21.03	21.52	22.01	4.74	5.23	5.26	5.74	6.23
	12H	20.55	20.99	21.07	21.48	22.05	4.69	5.13	5.21	5.62	6.19
12H	4H	20.02	20.61	20.50	21.09	21.56	4.95	5.54	5.43	6.02	6.50
	6H	20.35	20.85	20.87	21.36	21.85	4.85	5.34	5.37	5.86	6.35
	8H	20.47	20.90	20.98	21.40	21.97	4.82	5.25	5.33	5.75	6.32