

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: P1175350

Luminaire Tested: S125RDRP-S1090D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175350
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)
Test Lab: INNOVATION CENTER
Issue Date: 8/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S1090D850-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

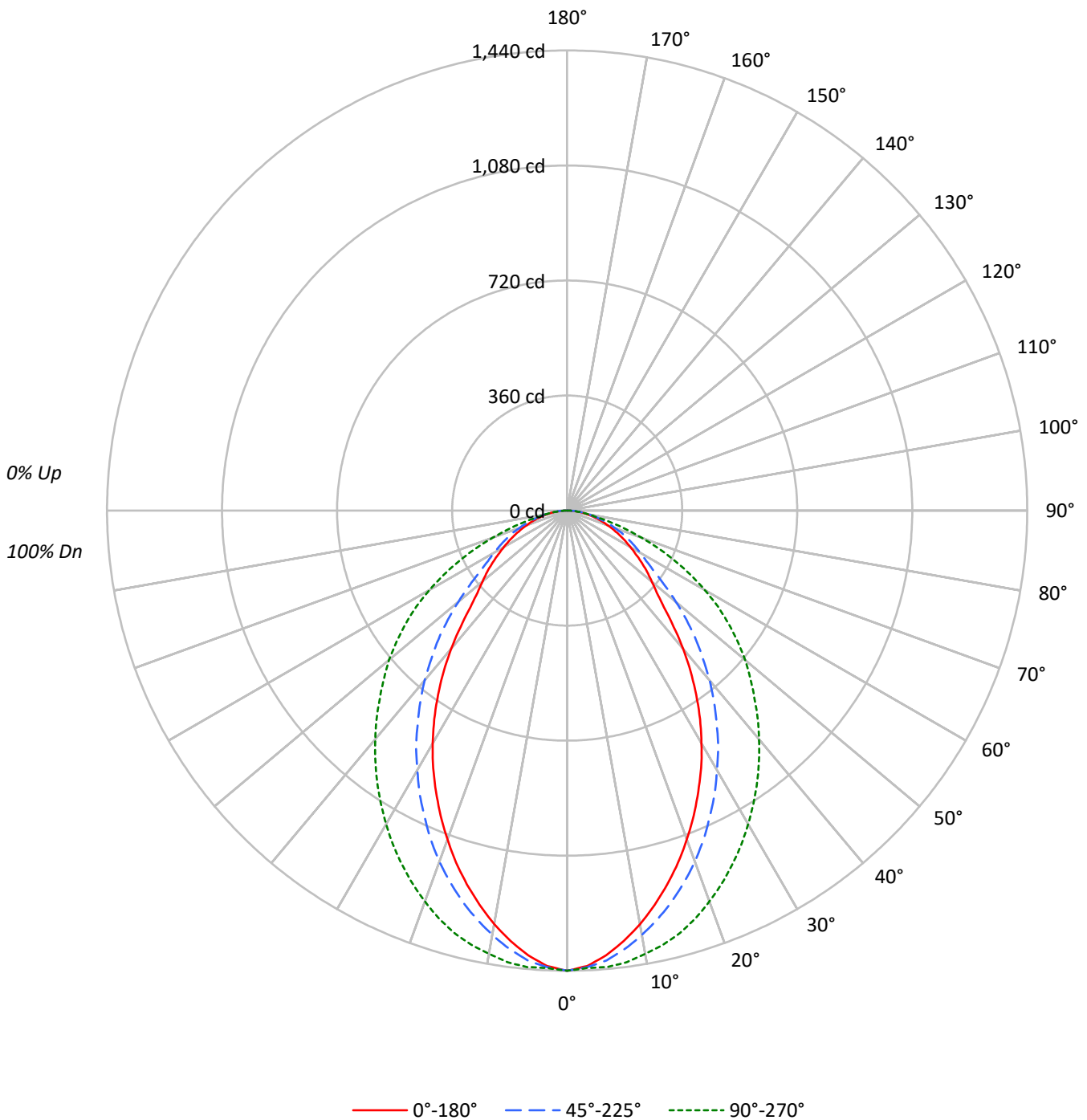
Lumens per Lamp: N/A
Luminaire Lumens: 2712.8 lumens
Efficiency: N/A
Efficacy: 77.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86												86																
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74												74																
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64												64																
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56												56																
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50												50																
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44												44																
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40												40																
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36												36																
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33												33																
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30												30																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9915	9915	9915
5°	9657	9767	9910
10°	9187	9427	9845
15°	8635	9027	9750
20°	8025	8562	9538
25°	7374	8023	9287
30°	6686	7454	9009
35°	5918	6853	8713
40°	5076	6230	8394
45°	4166	5546	8070
50°	3705	4766	7790
55°	3419	3991	7396
60°	3148	3635	6851
65°	2928	3425	6054
70°	2732	3199	4946
75°	2570	2958	3708
80°	2423	2716	2665
85°	2220	2702	2220

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8070 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.3	4.9
10°-20°	359.3	13.2
20°-30°	494.3	18.2
30°-40°	524.3	19.3
40°-50°	458.9	16.9
50°-60°	352.1	13.0
60°-70°	234.6	8.6
70°-80°	120.3	4.4
80°-90°	35.7	1.3
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°	987.0	36.4
0°-40°	1511.3	55.7
0°-60°	2322.3	85.6
0°-90°	2712.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2712.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1440	1440	1440	1440	1440	
5°	1397	1416	1413	1423	1434	131
15°	1211	1240	1266	1326	1368	339
25°	971	1004	1056	1145	1222	446
35°	704	737	815	935	1037	439
45°	428	463	570	711	829	338
55°	285	291	332	494	616	255
65°	180	181	210	276	372	179
75°	97	103	111	117	139	103
85°	28	32	34	33	28	32
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1440.0	1440.0	1440.0	1440.0	1440.0
2.5°	1426.5	1441.2	1430.2	1431.4	1432.6
5°	1397.2	1415.5	1413.1	1422.8	1433.8
7.5°	1358.1	1377.6	1383.7	1408.2	1425.3
10°	1314.1	1336.1	1348.3	1385.0	1408.2
12.5°	1263.9	1289.6	1309.2	1356.8	1391.1
15°	1211.4	1239.5	1266.4	1326.3	1367.8
17.5°	1155.1	1183.3	1218.7	1287.2	1337.3
20°	1095.3	1125.8	1168.6	1241.9	1301.8
22.5°	1034.1	1065.9	1114.8	1195.5	1263.9
25°	970.6	1003.6	1056.1	1145.4	1222.4
27.5°	908.2	938.8	999.9	1095.3	1179.6
30°	841.0	872.8	937.6	1042.7	1133.1
32.5°	773.8	805.5	880.1	990.1	1085.5
35°	704.1	737.1	815.3	935.1	1036.6
37.5°	634.4	668.6	755.4	878.9	986.5
40°	564.7	601.4	693.1	822.7	933.9
42.5°	493.8	533.0	629.5	767.7	882.6
45°	427.8	463.3	569.6	711.4	828.8
47.5°	380.2	400.9	506.1	654.0	777.4
50°	345.9	355.7	444.9	599.0	727.3
52.5°	315.4	321.5	385.0	547.6	672.3
55°	284.8	290.9	332.5	493.8	616.1
57.5°	255.5	259.1	293.4	440.1	559.8
60°	228.6	231.0	264.0	386.3	497.5
62.5°	204.1	205.4	235.9	331.3	435.2
65°	179.7	180.9	210.2	276.3	371.6
67.5°	157.7	157.7	185.8	226.1	310.5
70°	135.7	135.7	158.9	183.4	245.7
72.5°	116.1	118.6	134.5	147.9	191.9
75°	96.6	102.7	111.2	117.3	139.4
77.5°	78.2	85.6	89.2	91.7	92.9
80°	61.1	66.0	68.5	69.7	67.2
82.5°	45.2	48.9	50.1	50.1	46.5
85°	28.1	31.8	34.2	33.0	28.1
87.5°	13.4	18.3	19.6	17.1	13.4
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	14.58	16.08	14.95	16.40	16.71	18.61	20.11	18.98	20.42	20.74
	3H	16.17	17.52	16.55	17.84	18.21	20.00	21.34	20.38	21.67	22.03
	4H	16.82	18.08	17.22	18.43	18.80	20.40	21.66	20.80	22.01	22.39
	6H	17.32	18.49	17.74	18.86	19.25	20.61	21.77	21.02	22.14	22.53
	8H	17.51	18.61	17.93	19.00	19.41	20.67	21.78	21.09	22.17	22.57
	12H	17.63	18.69	18.06	19.07	19.50	20.70	21.76	21.13	22.14	22.57
4H	2H	15.35	16.61	15.75	16.96	17.34	18.74	20.00	19.14	20.35	20.73
	3H	17.14	18.18	17.55	18.58	18.98	20.31	21.36	20.72	21.76	22.16
	4H	17.91	18.85	18.34	19.26	19.70	20.82	21.76	21.25	22.18	22.62
	6H	18.55	19.36	19.00	19.81	20.27	21.15	21.97	21.60	22.41	22.87
	8H	18.77	19.54	19.24	19.98	20.45	21.25	22.01	21.71	22.46	22.92
	12H	18.95	19.63	19.43	20.11	20.58	21.32	22.00	21.80	22.48	22.95
8H	4H	18.29	19.05	18.75	19.50	19.97	20.92	21.69	21.38	22.13	22.60
	6H	19.07	19.70	19.56	20.19	20.67	21.34	21.97	21.84	22.46	22.94
	8H	19.38	19.95	19.90	20.46	20.95	21.50	22.07	22.01	22.58	23.06
	12H	19.64	20.15	20.15	20.64	21.20	21.64	22.14	22.15	22.63	23.20
12H	4H	18.33	19.01	18.81	19.49	19.96	20.92	21.60	21.40	22.08	22.55
	6H	19.14	19.71	19.65	20.22	20.71	21.35	21.92	21.87	22.43	22.92
	8H	19.52	20.03	20.03	20.52	21.08	21.56	22.06	22.07	22.56	23.12