

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: P1061463

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061463
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S1090D850-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

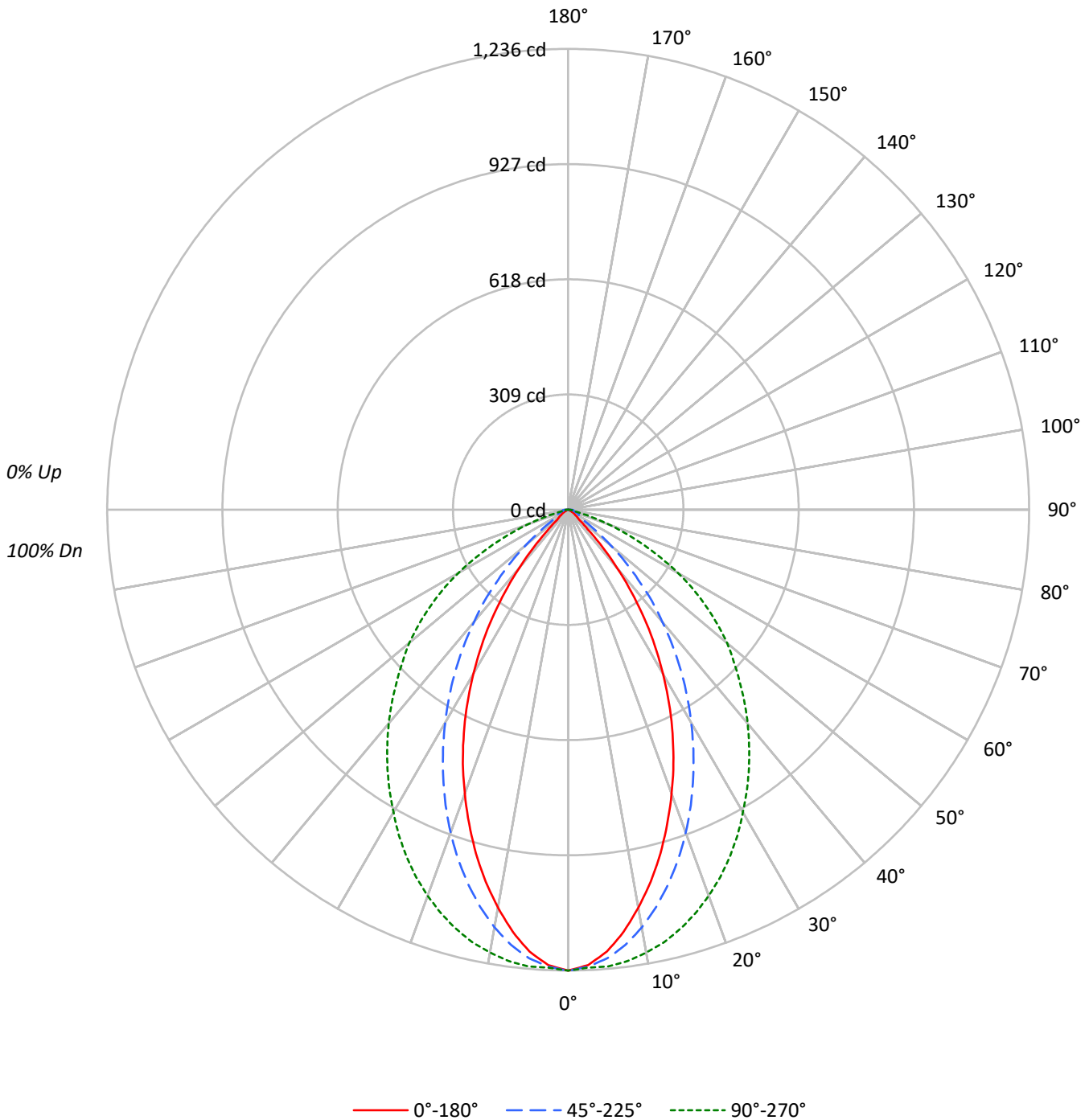
Lumens per Lamp: N/A
Luminaire Lumens: 1599.5 lumens
Efficiency: N/A
Efficacy: 45.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8512	8512	8512
5°	8222	8345	8497
10°	7577	7952	8432
15°	6805	7403	8294
20°	5938	6753	8072
25°	5030	6021	7795
30°	4040	5242	7448
35°	2991	4422	7101
40°	1852	3531	6728
45°	723	2581	6326
50°	338	1619	5959
55°	247	693	5409
60°	171	492	4692
65°	112	515	3648
70°	111	471	2295
75°	146	476	732
80°	218	543	492
85°	324	1082	758

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6326 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.4	7.1
10°-20°	293.8	18.4
20°-30°	374.1	23.4
30°-40°	348.2	21.8
40°-50°	239.7	15.0
50°-60°	135.7	8.5
60°-70°	64.1	4.0
70°-80°	20.0	1.3
80°-90°	10.5	0.7
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°	781.3	48.8
0°-40°	1129.5	70.6
0°-60°	1504.9	94.1
0°-90°	1599.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1599.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1236	1236	1236	1236	1236	
5°	1190	1206	1207	1218	1229	110
15°	955	986	1038	1117	1164	266
25°	662	705	793	926	1026	302
35°	356	405	526	706	845	220
45°	74	118	265	479	650	70
55°	21	23	58	276	451	19
65°	7	8	32	99	224	8
75°	6	12	18	19	28	6
85°	4	11	14	12	10	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1236.3	1236.3	1236.3	1236.3	1236.3
2.5°	1222.5	1234.9	1226.7	1228.0	1229.4
5°	1189.6	1206.1	1207.4	1218.4	1229.4
7.5°	1141.5	1162.1	1177.2	1203.3	1221.2
10°	1083.8	1108.5	1137.4	1180.0	1206.1
12.5°	1022.0	1050.8	1090.7	1151.1	1188.2
15°	954.7	986.3	1038.5	1116.8	1163.5
17.5°	883.2	919.0	982.2	1075.6	1134.6
20°	810.4	848.9	921.7	1028.9	1101.7
22.5°	737.6	777.5	858.5	978.0	1065.9
25°	662.1	704.7	792.6	925.8	1026.1
27.5°	585.2	629.1	726.7	872.3	983.5
30°	508.2	554.9	659.3	817.3	936.8
32.5°	432.7	479.4	593.4	762.4	891.5
35°	355.8	405.2	526.1	706.0	844.8
37.5°	278.8	332.4	460.2	648.4	796.7
40°	206.0	256.9	392.9	592.0	748.6
42.5°	137.4	186.8	332.4	535.7	699.2
45°	74.2	118.1	265.1	479.4	649.7
47.5°	39.8	63.2	207.4	424.5	601.7
50°	31.6	35.7	151.1	373.6	556.3
52.5°	26.1	28.8	98.9	325.6	504.1
55°	20.6	23.4	57.7	276.1	450.6
57.5°	16.5	19.2	37.1	229.4	398.4
60°	12.4	15.1	35.7	184.1	340.7
62.5°	9.6	11.0	33.0	141.5	280.2
65°	6.9	8.2	31.6	98.9	223.9
67.5°	5.5	6.9	28.8	63.2	167.6
70°	5.5	5.5	23.4	41.2	114.0
72.5°	5.5	9.6	20.6	27.5	68.7
75°	5.5	12.4	17.9	19.2	27.5
77.5°	5.5	13.7	15.1	15.1	15.1
80°	5.5	12.4	13.7	13.7	12.4
82.5°	5.5	11.0	12.4	13.7	11.0
85°	4.1	11.0	13.7	12.4	9.6
87.5°	4.1	11.0	12.4	11.0	6.9
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	0.00	0.00	0.00	0.00	0.30	16.69	17.98	17.05	18.29	18.60
	3H	0.00	0.00	0.00	0.33	0.69	17.41	18.55	17.79	18.88	19.24
	4H	0.00	0.82	0.16	1.17	1.56	17.43	18.49	17.83	18.84	19.23
	6H	1.02	2.00	1.44	2.37	2.76	17.38	18.36	17.79	18.73	19.12
	8H	1.66	2.59	2.09	2.98	3.38	17.36	18.28	17.79	18.67	19.08
	12H	2.25	3.13	2.69	3.52	3.95	17.34	18.22	17.77	18.60	19.04
4H	2H	1.19	2.26	1.60	2.61	2.99	16.48	17.54	16.88	17.89	18.27
	3H	2.01	2.87	2.42	3.28	3.68	17.23	18.10	17.65	18.51	18.91
	4H	3.02	3.79	3.46	4.21	4.66	17.26	18.04	17.70	18.46	18.90
	6H	4.30	4.97	4.76	5.41	5.88	17.24	17.91	17.70	18.35	18.82
	8H	4.88	5.50	5.35	5.95	6.42	17.22	17.85	17.69	18.30	18.77
	12H	5.44	5.99	5.93	6.47	6.95	17.23	17.78	17.72	18.27	18.74
8H	4H	4.43	5.06	4.90	5.50	5.98	17.15	17.77	17.62	18.22	18.69
	6H	6.00	6.50	6.50	7.00	7.48	17.13	17.64	17.64	18.14	18.62
	8H	6.79	7.25	7.31	7.76	8.26	17.15	17.60	17.67	18.12	18.61
	12H	7.63	8.03	8.14	8.53	9.10	17.21	17.61	17.72	18.11	18.68
12H	4H	4.65	5.20	5.14	5.69	6.16	17.10	17.65	17.59	18.14	18.61
	6H	6.37	6.82	6.89	7.34	7.83	17.09	17.54	17.61	18.06	18.55
	8H	7.36	7.76	7.87	8.26	8.83	17.14	17.54	17.65	18.03	18.61