

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: P1061464

Luminaire Tested: S125RDRP-S1090D850-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061464
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S1090D850-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

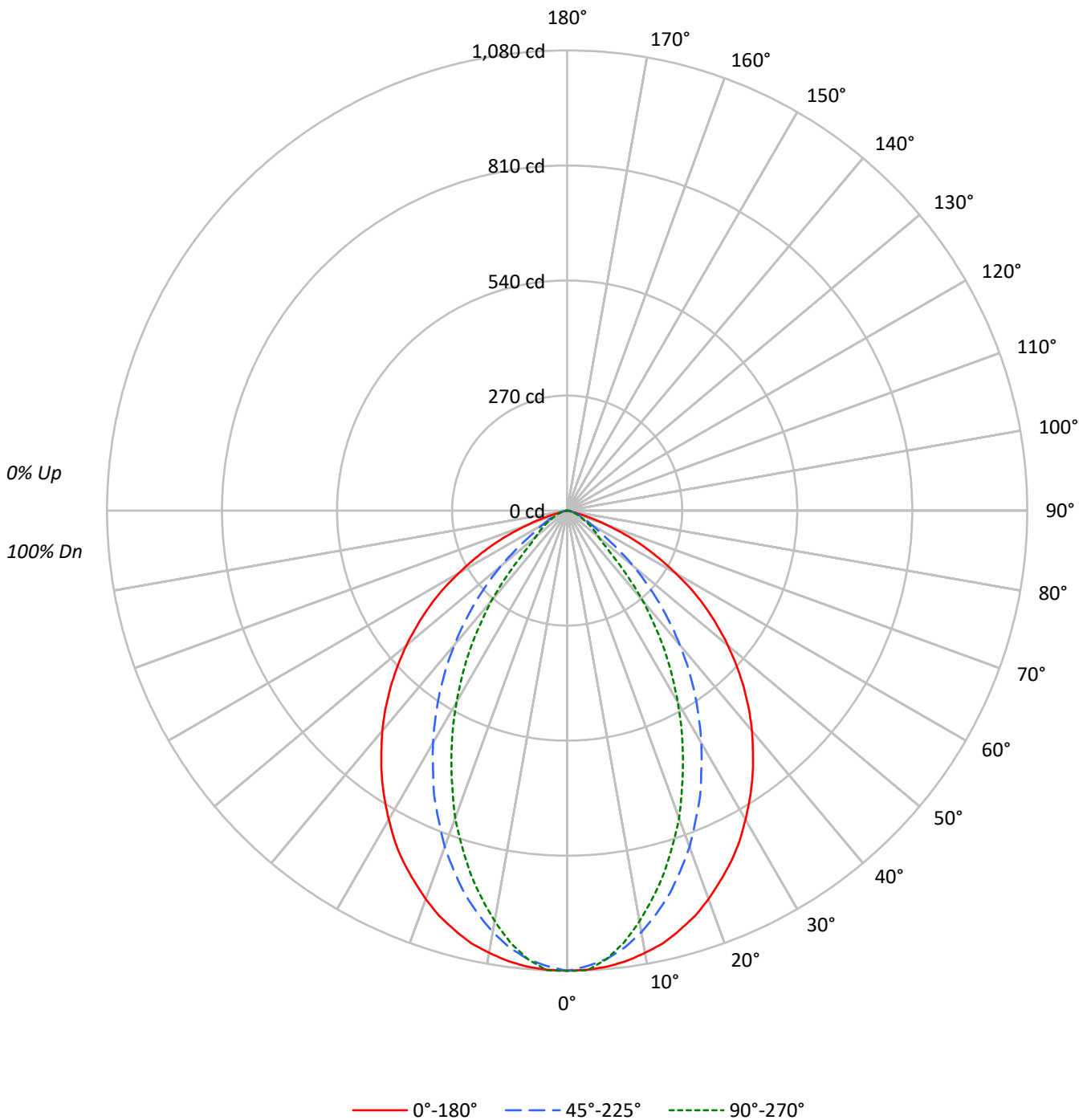
Lumens per Lamp: N/A
Luminaire Lumens: 1561.9 lumens
Efficiency: N/A
Efficacy: 44.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7436	7436	7436
5°	7426	7303	7303
10°	7368	7023	6840
15°	7268	6632	6270
20°	7109	6153	5631
25°	6912	5609	4889
30°	6655	5008	4124
35°	6379	4383	3345
40°	6069	3700	2479
45°	5706	2966	1497
50°	5277	2176	1029
55°	4761	1335	857
60°	4044	907	680
65°	3196	692	536
70°	2017	497	443
75°	657	364	364
80°	218	274	325
85°	111	213	213

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5706 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	6.4
10°-20°	263.8	16.9
20°-30°	347.0	22.2
30°-40°	340.9	21.8
40°-50°	257.9	16.5
50°-60°	156.4	10.0
60°-70°	73.8	4.7
70°-80°	19.3	1.2
80°-90°	2.9	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°	710.6	45.5
0°-40°	1051.6	67.3
0°-60°	1465.9	93.9
0°-90°	1561.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1561.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1080	1080	1080	1080	1080	
5°	1074	1072	1057	1058	1057	102
15°	1020	992	930	895	880	287
25°	910	841	738	670	644	418
35°	759	657	522	430	398	474
45°	586	461	305	194	154	451
55°	397	272	111	76	71	353
65°	196	100	42	36	33	193
75°	25	16	14	14	14	38
85°	1	1	3	3	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1080.0	1080.0	1080.0	1080.0	1080.0
2.5°	1078.6	1078.6	1070.4	1080.0	1080.0
5°	1074.5	1071.7	1056.6	1058.0	1056.6
7.5°	1066.3	1060.8	1034.7	1027.8	1022.3
10°	1053.9	1042.9	1004.5	988.0	978.4
12.5°	1040.2	1021.0	968.8	945.5	930.4
15°	1019.6	992.2	930.4	894.7	879.6
17.5°	997.6	957.8	885.1	842.6	823.4
20°	970.2	923.5	839.8	787.7	768.5
22.5°	940.0	885.1	787.7	730.0	704.0
25°	909.8	841.2	738.3	669.7	643.6
27.5°	875.5	797.3	682.0	610.7	581.8
30°	837.1	753.4	629.9	555.8	518.7
32.5°	798.7	708.1	575.0	494.0	457.0
35°	758.9	657.3	521.5	429.5	398.0
37.5°	716.3	609.3	466.6	370.5	333.5
40°	675.2	561.3	411.7	310.1	275.8
42.5°	631.2	513.2	356.8	251.1	212.7
45°	586.0	461.1	304.6	193.5	153.7
47.5°	539.3	414.4	252.5	142.7	115.3
50°	492.6	365.0	203.1	105.7	96.1
52.5°	444.6	317.0	153.7	87.8	83.7
55°	396.6	271.7	111.2	75.5	71.4
57.5°	347.2	222.3	83.7	64.5	60.4
60°	293.7	178.4	65.9	53.5	49.4
62.5°	244.3	140.0	53.5	43.9	41.2
65°	196.2	100.2	42.5	35.7	32.9
67.5°	146.8	67.2	32.9	27.4	27.4
70°	100.2	43.9	24.7	22.0	22.0
72.5°	60.4	26.1	17.8	17.8	17.8
75°	24.7	16.5	13.7	13.7	13.7
77.5°	8.2	9.6	9.6	11.0	11.0
80°	5.5	5.5	6.9	8.2	8.2
82.5°	2.7	4.1	4.1	5.5	5.5
85°	1.4	1.4	2.7	2.7	2.7
87.5°	0.0	0.0	0.0	1.4	1.4
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	16.30	17.63	16.66	17.94	18.26	6.96	8.29	7.32	8.60	8.92
	3H	17.01	18.18	17.39	18.51	18.88	7.74	8.91	8.12	9.24	9.61
	4H	17.02	18.12	17.42	18.47	18.85	7.98	9.08	8.39	9.43	9.81
	6H	16.95	17.96	17.37	18.33	18.72	8.16	9.17	8.58	9.54	9.93
	8H	16.91	17.86	17.34	18.25	18.66	8.21	9.16	8.64	9.55	9.96
	12H	16.87	17.78	17.30	18.16	18.59	8.21	9.12	8.65	9.51	9.94
4H	2H	16.13	17.23	16.53	17.58	17.96	7.44	8.54	7.84	8.89	9.27
	3H	16.88	17.77	17.29	18.17	18.58	8.35	9.24	8.76	9.64	10.05
	4H	16.89	17.69	17.33	18.11	18.55	8.66	9.46	9.10	9.88	10.32
	6H	16.83	17.52	17.30	17.96	18.43	8.92	9.61	9.38	10.05	10.52
	8H	16.78	17.42	17.25	17.87	18.34	8.99	9.62	9.46	10.07	10.54
	12H	16.74	17.30	17.22	17.78	18.26	9.01	9.57	9.50	10.06	10.53
8H	4H	16.78	17.42	17.25	17.86	18.33	8.77	9.41	9.24	9.86	10.33
	6H	16.70	17.22	17.20	17.72	18.20	9.09	9.61	9.59	10.11	10.59
	8H	16.65	17.11	17.17	17.63	18.12	9.20	9.66	9.72	10.18	10.67
	12H	16.61	17.02	17.12	17.51	18.09	9.26	9.67	9.77	10.16	10.74
12H	4H	16.73	17.30	17.22	17.78	18.25	8.75	9.31	9.23	9.79	10.27
	6H	16.64	17.11	17.17	17.63	18.12	9.06	9.53	9.59	10.04	10.54
	8H	16.61	17.02	17.12	17.52	18.09	9.20	9.61	9.72	10.11	10.68