

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: P1175348

Luminaire Tested: S125RDRP-S1090D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175348
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-S1090D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

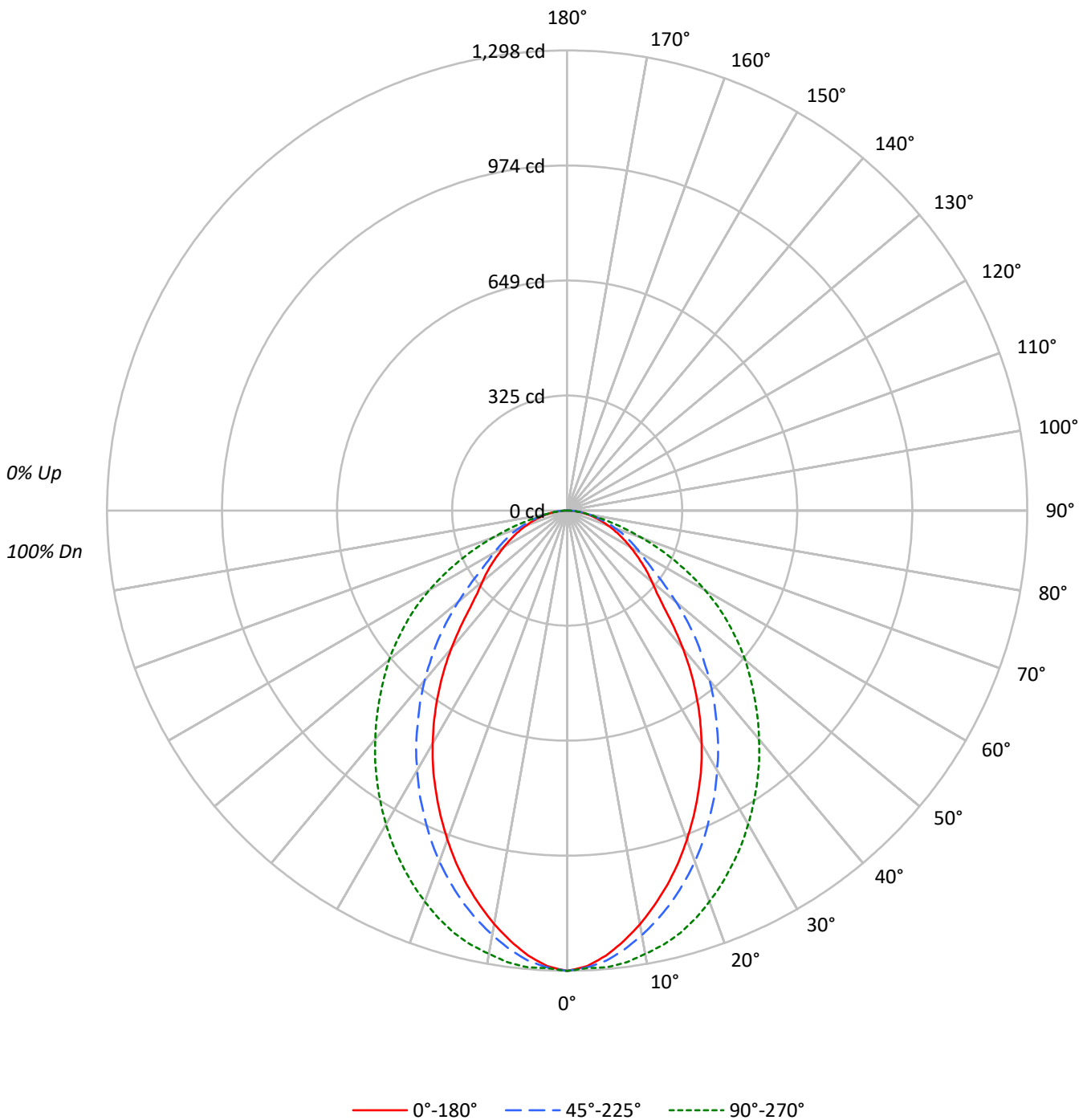
Lumens per Lamp: N/A
Luminaire Lumens: 2446.1 lumens
Efficiency: N/A
Efficacy: 69.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): 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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8940	8940	8940
5°	8708	8807	8936
10°	8284	8500	8878
15°	7786	8140	8792
20°	7236	7721	8601
25°	6649	7235	8373
30°	6029	6721	8124
35°	5337	6180	7856
40°	4577	5618	7569
45°	3757	5001	7277
50°	3341	4297	7025
55°	3083	3599	6668
60°	2838	3279	6177
65°	2639	3089	5459
70°	2462	2885	4459
75°	2317	2668	3344
80°	2185	2446	2403
85°	2007	2441	2007

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7277 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	4.9
10°-20°	324.0	13.2
20°-30°	445.7	18.2
30°-40°	472.8	19.3
40°-50°	413.8	16.9
50°-60°	317.5	13.0
60°-70°	211.5	8.6
70°-80°	108.4	4.4
80°-90°	32.2	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°	890.0	36.4
0°-40°	1362.7	55.7
0°-60°	2094.0	85.6
0°-90°	2446.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2446.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1298	1298	1298	1298	1298	
5°	1260	1276	1274	1283	1293	118
15°	1092	1118	1142	1196	1233	306
25°	875	905	952	1033	1102	402
35°	635	665	735	843	935	396
45°	386	418	514	642	747	305
55°	257	262	300	445	556	230
65°	162	163	190	249	335	161
75°	87	93	100	106	126	93
85°	25	29	31	30	25	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1298.4	1298.4	1298.4	1298.4	1298.4
2.5°	1286.3	1299.5	1289.6	1290.7	1291.8
5°	1259.9	1276.4	1274.2	1283.0	1292.9
7.5°	1224.6	1242.2	1247.7	1269.8	1285.2
10°	1184.9	1204.7	1215.8	1248.8	1269.8
12.5°	1139.7	1162.9	1180.5	1223.5	1254.3
15°	1092.3	1117.7	1141.9	1195.9	1233.4
17.5°	1041.6	1067.0	1098.9	1160.7	1205.8
20°	987.6	1015.2	1053.7	1119.9	1173.9
22.5°	932.5	961.1	1005.2	1078.0	1139.7
25°	875.2	904.9	952.3	1032.8	1102.2
27.5°	819.0	846.5	901.6	987.6	1063.7
30°	758.3	787.0	845.4	940.2	1021.8
32.5°	697.7	726.4	793.6	892.8	978.8
35°	634.9	664.6	735.2	843.2	934.7
37.5°	572.1	602.9	681.2	792.5	889.5
40°	509.2	542.3	625.0	741.8	842.1
42.5°	445.3	480.6	567.7	692.2	795.8
45°	385.8	417.7	513.6	641.5	747.3
47.5°	342.8	361.5	456.3	589.7	701.0
50°	311.9	320.8	401.2	540.1	655.8
52.5°	284.4	289.9	347.2	493.8	606.2
55°	256.8	262.3	299.8	445.3	555.5
57.5°	230.4	233.7	264.5	396.8	504.8
60°	206.1	208.3	238.1	348.3	448.6
62.5°	184.1	185.2	212.7	298.7	392.4
65°	162.0	163.1	189.6	249.1	335.1
67.5°	142.2	142.2	167.5	203.9	280.0
70°	122.3	122.3	143.3	165.3	221.5
72.5°	104.7	106.9	121.2	133.4	173.1
75°	87.1	92.6	100.3	105.8	125.7
77.5°	70.5	77.2	80.5	82.7	83.8
80°	55.1	59.5	61.7	62.8	60.6
82.5°	40.8	44.1	45.2	45.2	41.9
85°	25.4	28.7	30.9	29.8	25.4
87.5°	12.1	16.5	17.6	15.4	12.1
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	14.23	15.73	14.59	16.04	16.35	18.25	19.75	18.62	20.06	20.38
	3H	15.81	17.16	16.19	17.49	17.85	19.64	20.98	20.02	21.31	21.67
	4H	16.46	17.72	16.86	18.07	18.45	20.04	21.30	20.44	21.65	22.03
	6H	16.97	18.13	17.38	18.50	18.89	20.25	21.41	20.66	21.78	22.17
	8H	17.15	18.25	17.57	18.64	19.05	20.31	21.42	20.73	21.81	22.21
	12H	17.27	18.33	17.70	18.72	19.14	20.34	21.40	20.77	21.78	22.21
4H	2H	15.00	16.26	15.40	16.61	16.98	18.38	19.64	18.78	19.99	20.37
	3H	16.78	17.82	17.19	18.22	18.63	19.95	21.00	20.36	21.40	21.80
	4H	17.55	18.49	17.98	18.90	19.34	20.46	21.40	20.89	21.82	22.26
	6H	18.19	19.00	18.64	19.45	19.91	20.79	21.61	21.24	22.05	22.51
	8H	18.41	19.18	18.88	19.62	20.09	20.89	21.65	21.35	22.10	22.56
	12H	18.59	19.27	19.07	19.75	20.22	20.96	21.64	21.44	22.12	22.59
8H	4H	17.93	18.69	18.39	19.14	19.61	20.56	21.33	21.02	21.77	22.24
	6H	18.71	19.34	19.20	19.83	20.31	20.98	21.61	21.48	22.10	22.58
	8H	19.02	19.59	19.54	20.10	20.59	21.14	21.71	21.65	22.22	22.71
	12H	19.29	19.79	19.80	20.28	20.84	21.28	21.78	21.79	22.27	22.84
12H	4H	17.97	18.65	18.45	19.13	19.60	20.56	21.24	21.04	21.72	22.19
	6H	18.78	19.35	19.30	19.86	20.35	20.99	21.56	21.51	22.07	22.56
	8H	19.17	19.67	19.68	20.16	20.72	21.20	21.70	21.71	22.20	22.76