

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061931

Luminaire Tested: S125RDR-H1270D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061931
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: S125RDR-H1270D835-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

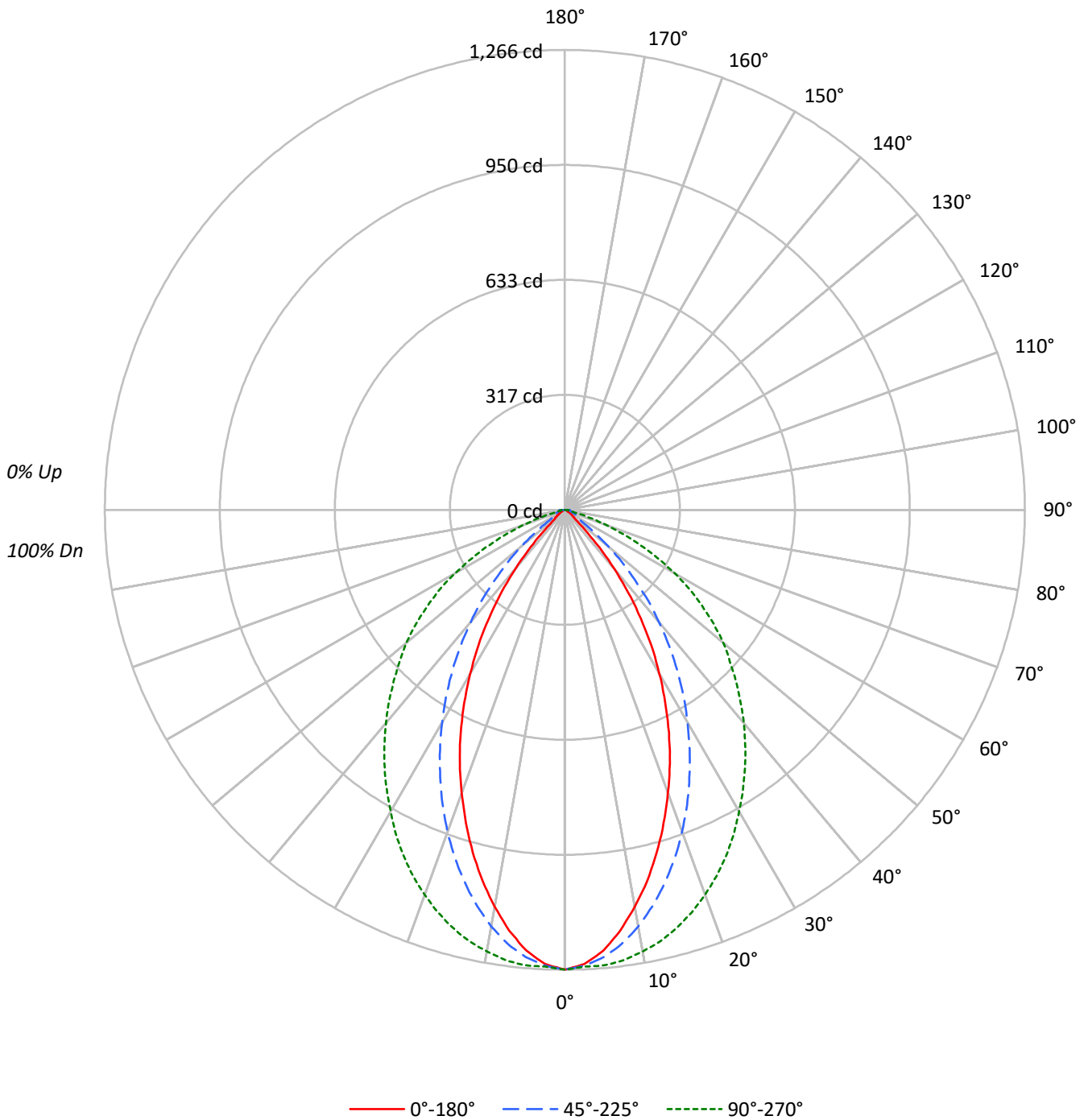
Lumens per Lamp: N/A
Luminaire Lumens: 1637.4 lumens
Efficiency: N/A
Efficacy: 44.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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	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°	8713	8713	8713
5°	8416	8543	8698
10°	7757	8140	8632
15°	6966	7578	8490
20°	6079	6913	8263
25°	5149	6164	7980
30°	4137	5367	7624
35°	3061	4527	7269
40°	1896	3615	6888
45°	739	2643	6476
50°	346	1657	6100
55°	253	709	5536
60°	175	504	4802
65°	114	526	3734
70°	113	481	2349
75°	149	487	748
80°	222	559	504
85°	332	1114	774

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6476 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.1	7.1
10°-20°	300.7	18.4
20°-30°	383.0	23.4
30°-40°	356.5	21.8
40°-50°	245.4	15.0
50°-60°	138.9	8.5
60°-70°	65.6	4.0
70°-80°	20.5	1.3
80°-90°	10.7	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°	799.8	48.8
0°-40°	1156.3	70.6
0°-60°	1540.5	94.1
0°-90°	1637.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1637.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1266	1266	1266	1266	1266	
5°	1218	1235	1236	1247	1258	113
15°	977	1010	1063	1143	1191	272
25°	678	721	811	948	1050	309
35°	364	415	539	723	865	225
45°	76	121	271	491	665	71
55°	21	24	59	283	461	19
65°	7	8	32	101	229	8
75°	6	13	18	20	28	6
85°	4	11	14	13	10	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1265.5	1265.5	1265.5	1265.5	1265.5
2.5°	1251.5	1264.1	1255.7	1257.1	1258.5
5°	1217.7	1234.6	1236.0	1247.3	1258.5
7.5°	1168.5	1189.6	1205.1	1231.8	1250.1
10°	1109.5	1134.8	1164.3	1207.9	1234.6
12.5°	1046.2	1075.7	1116.5	1178.4	1216.3
15°	977.3	1009.6	1063.1	1143.2	1191.0
17.5°	904.2	940.7	1005.4	1101.0	1161.5
20°	829.6	869.0	943.5	1053.2	1127.7
22.5°	755.1	795.9	878.9	1001.2	1091.2
25°	677.8	721.4	811.4	947.8	1050.4
27.5°	599.0	644.0	743.9	892.9	1006.8
30°	520.3	568.1	675.0	836.7	959.0
32.5°	442.9	490.8	607.5	780.4	912.6
35°	364.2	414.8	538.6	722.8	864.8
37.5°	285.5	340.3	471.1	663.7	815.6
40°	210.9	263.0	402.2	606.1	766.4
42.5°	140.6	191.2	340.3	548.4	715.7
45°	75.9	120.9	271.4	490.8	665.1
47.5°	40.8	64.7	212.3	434.5	615.9
50°	32.3	36.6	154.7	382.5	569.5
52.5°	26.7	29.5	101.2	333.3	516.1
55°	21.1	23.9	59.1	282.6	461.2
57.5°	16.9	19.7	38.0	234.8	407.8
60°	12.7	15.5	36.6	188.4	348.7
62.5°	9.8	11.2	33.7	144.8	286.9
65°	7.0	8.4	32.3	101.2	229.2
67.5°	5.6	7.0	29.5	64.7	171.6
70°	5.6	5.6	23.9	42.2	116.7
72.5°	5.6	9.8	21.1	28.1	70.3
75°	5.6	12.7	18.3	19.7	28.1
77.5°	5.6	14.1	15.5	15.5	15.5
80°	5.6	12.7	14.1	14.1	12.7
82.5°	5.6	11.2	12.7	14.1	11.2
85°	4.2	11.2	14.1	12.7	9.8
87.5°	4.2	11.2	12.7	11.2	7.0
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	0.00	0.00	0.00	0.08	0.40	16.77	18.06	17.13	18.37	18.68
	3H	0.00	0.08	0.00	0.41	0.78	17.49	18.63	17.87	18.96	19.32
	4H	0.00	0.90	0.24	1.25	1.64	17.51	18.57	17.91	18.92	19.31
	6H	1.10	2.07	1.51	2.44	2.84	17.46	18.44	17.88	18.81	19.20
	8H	1.74	2.66	2.17	3.05	3.46	17.44	18.36	17.87	18.75	19.16
	12H	2.32	3.21	2.76	3.59	4.02	17.42	18.30	17.85	18.69	19.12
4H	2H	1.27	2.34	1.68	2.69	3.07	16.56	17.62	16.96	17.97	18.35
	3H	2.08	2.95	2.50	3.35	3.76	17.31	18.18	17.73	18.59	18.99
	4H	3.10	3.87	3.53	4.29	4.73	17.34	18.12	17.78	18.54	18.98
	6H	4.38	5.05	4.84	5.49	5.96	17.32	17.99	17.79	18.44	18.90
	8H	4.95	5.58	5.42	6.02	6.50	17.31	17.93	17.78	18.38	18.85
	12H	5.51	6.06	6.00	6.55	7.02	17.31	17.86	17.80	18.35	18.82
8H	4H	4.51	5.14	4.98	5.59	6.06	17.23	17.85	17.70	18.30	18.77
	6H	6.08	6.59	6.58	7.08	7.57	17.22	17.72	17.72	18.22	18.70
	8H	6.87	7.32	7.39	7.84	8.33	17.23	17.68	17.75	18.20	18.69
	12H	7.70	8.10	8.22	8.60	9.17	17.29	17.69	17.80	18.19	18.76
12H	4H	4.74	5.29	5.22	5.77	6.24	17.18	17.73	17.67	18.22	18.69
	6H	6.45	6.91	6.97	7.42	7.92	17.17	17.63	17.69	18.14	18.63
	8H	7.44	7.84	7.95	8.33	8.91	17.22	17.62	17.73	18.12	18.69