

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: P1061926

Luminaire Tested: S125RDR-H1270D830-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061926
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1270D830-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

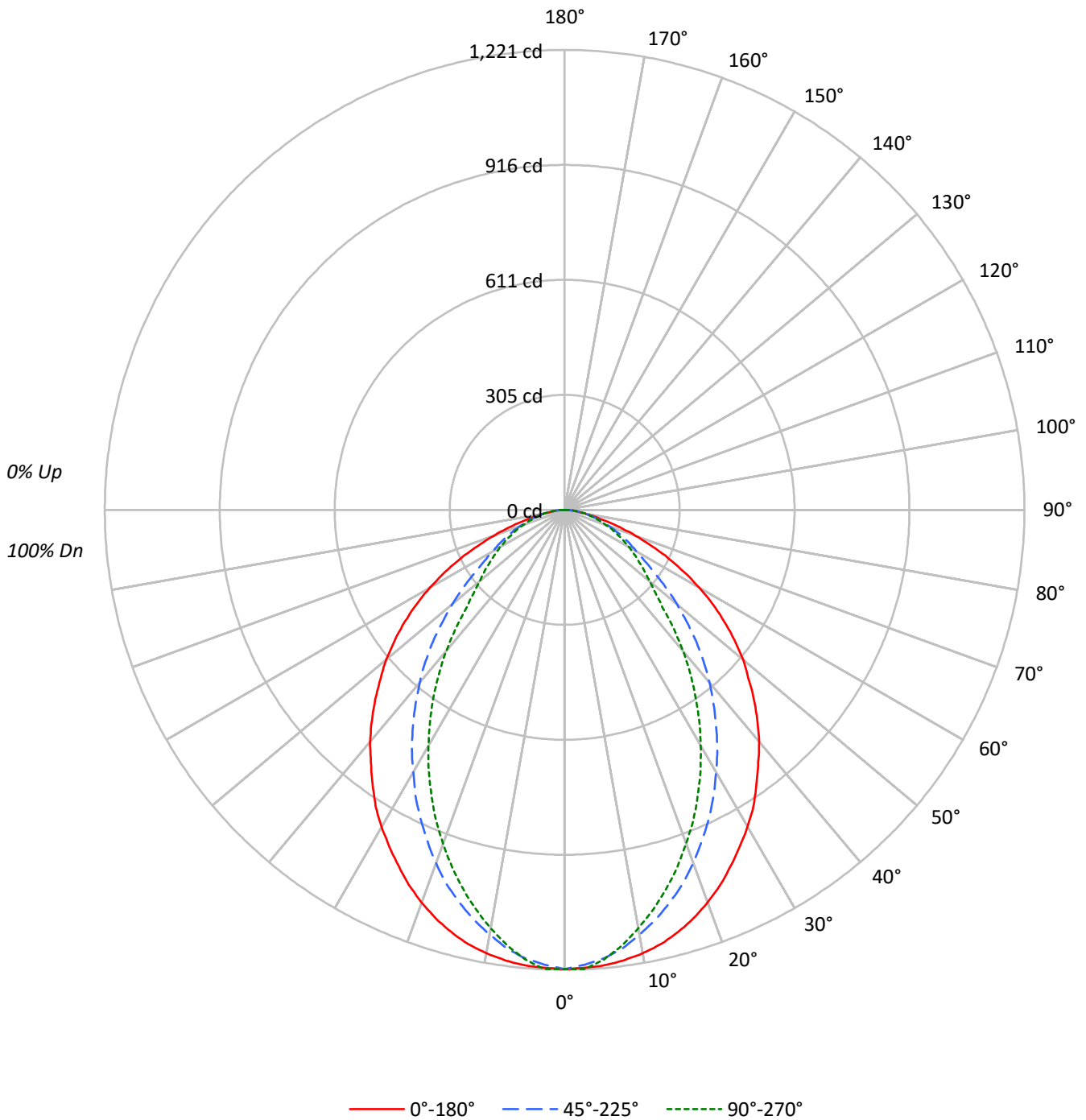
Lumens per Lamp: N/A
Luminaire Lumens: 2310.0 lumens
Efficiency: N/A
Efficacy: 63.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1061926

CATALOG NUMBER: S125RDR-H1270D830-X4F0-XX-UDD-WVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1061926

CATALOG NUMBER: S125RDR-H1270D830-X4F0-XX-UDD-WVL-B

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	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	108	104	100	97	100	97	94	96	93	91	92	90	89	87			87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75			75	
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65			65	
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57			57	
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50			50	
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45			45	
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40			40	
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36			36	
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33			33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30			30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8396	8396	8396
5°	8391	8263	8281
10°	8359	8007	7887
15°	8277	7692	7428
20°	8129	7315	6907
25°	7926	6880	6357
30°	7726	6390	5747
35°	7467	5898	5097
40°	7224	5379	4392
45°	6923	4809	3597
50°	6623	4170	3148
55°	6214	3481	2909
60°	5671	3045	2717
65°	4961	2783	2524
70°	4024	2506	2345
75°	2889	2290	2184
80°	1994	2046	2046
85°	1461	1777	1880

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6923 cd/sqm



TEST NUMBER: P1061926

CATALOG NUMBER: S125RDR-H1270D830-X4F0-XX-UDD-WVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.4	4.9
10°-20°	306.7	13.3
20°-30°	423.9	18.3
30°-40°	451.5	19.5
40°-50°	396.6	17.2
50°-60°	300.7	13.0
60°-70°	195.3	8.5
70°-80°	96.7	4.2
80°-90°	25.3	1.1
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°	843.9	36.5
0°-40°	1295.4	56.1
0°-60°	1992.7	86.3
0°-90°	2310.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2310.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1219	1219	1219	1219	1219	
5°	1214	1212	1196	1200	1198	115
15°	1161	1135	1079	1054	1042	327
25°	1043	986	906	859	837	481
35°	888	806	702	638	606	556
45°	711	612	494	405	369	548
55°	518	416	290	250	242	462
65°	304	226	171	158	155	301
75°	109	95	86	83	82	121
85°	18	21	22	22	24	23
90°	0	0	0	0	0	



TEST NUMBER: P1061926

CATALOG NUMBER: S125RDR-H1270D830-X4F0-XX-UDD-WVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1219.4	1219.4	1219.4	1219.4	1219.4
2.5°	1216.8	1219.4	1208.8	1218.1	1220.7
5°	1214.1	1211.5	1195.6	1199.6	1198.2
7.5°	1206.2	1200.9	1174.4	1171.7	1166.5
10°	1195.6	1182.3	1145.3	1136.0	1128.1
12.5°	1181.0	1159.8	1114.8	1096.3	1087.0
15°	1161.2	1134.7	1079.1	1053.9	1042.0
17.5°	1137.3	1100.3	1042.0	1007.6	994.3
20°	1109.5	1065.8	998.3	958.6	942.7
22.5°	1079.1	1027.4	952.0	909.6	892.4
25°	1043.3	986.4	905.6	859.3	836.8
27.5°	1007.6	944.0	856.6	805.0	781.2
30°	971.8	899.0	803.7	748.1	722.9
32.5°	933.4	852.7	754.7	693.8	664.7
35°	888.4	806.3	701.7	638.2	606.4
37.5°	844.7	757.3	650.1	578.6	548.1
40°	803.7	711.0	598.5	520.3	488.6
42.5°	757.3	662.0	546.8	464.7	429.0
45°	711.0	611.7	493.9	405.1	369.4
47.5°	662.0	564.0	438.2	350.9	327.0
50°	618.3	515.0	389.3	309.8	293.9
52.5°	568.0	467.4	338.9	278.0	267.5
55°	517.7	415.7	290.0	250.2	242.3
57.5°	466.1	369.4	251.6	226.4	218.5
60°	411.8	321.7	221.1	201.2	197.3
62.5°	357.5	272.7	194.6	180.1	174.8
65°	304.5	226.4	170.8	157.6	154.9
67.5°	250.2	184.0	147.0	137.7	136.4
70°	199.9	149.6	124.5	119.2	116.5
72.5°	153.6	119.2	104.6	100.6	99.3
75°	108.6	95.3	86.1	83.4	82.1
77.5°	72.8	72.8	68.8	66.2	67.5
80°	50.3	53.0	51.6	51.6	51.6
82.5°	33.1	35.7	37.1	37.1	37.1
85°	18.5	21.2	22.5	22.5	23.8
87.5°	6.6	7.9	9.3	10.6	10.6
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061926
 CATALOG NUMBER: S125RDR-H1270D830-X4F0-XX-UDD-WVL-B

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	17.95	19.44	18.31	19.75	20.07	14.19	15.68	14.55	15.99	16.31
	3H	19.26	20.59	19.63	20.92	21.28	15.77	17.11	16.15	17.44	17.80
	4H	19.63	20.88	20.03	21.23	21.61	16.37	17.63	16.77	17.97	18.35
	6H	19.80	20.96	20.21	21.33	21.72	16.84	18.00	17.26	18.37	18.76
	8H	19.84	20.94	20.27	21.33	21.73	17.00	18.10	17.43	18.49	18.90
	12H	19.85	20.90	20.28	21.29	21.72	17.12	18.17	17.55	18.55	18.98
4H	2H	18.06	19.31	18.46	19.66	20.04	14.85	16.10	15.25	16.45	16.83
	3H	19.54	20.58	19.96	20.98	21.38	16.63	17.67	17.04	18.07	18.47
	4H	20.02	20.95	20.45	21.37	21.81	17.35	18.28	17.78	18.70	19.14
	6H	20.31	21.12	20.76	21.56	22.02	17.94	18.75	18.40	19.19	19.65
	8H	20.37	21.13	20.84	21.58	22.04	18.14	18.90	18.61	19.34	19.81
	12H	20.42	21.09	20.90	21.57	22.04	18.30	18.97	18.78	19.45	19.92
8H	4H	20.10	20.86	20.57	21.30	21.77	17.66	18.42	18.12	18.86	19.33
	6H	20.47	21.09	20.96	21.58	22.06	18.37	18.99	18.86	19.48	19.96
	8H	20.58	21.14	21.10	21.65	22.14	18.64	19.21	19.16	19.72	20.20
	12H	20.67	21.16	21.18	21.66	22.22	18.87	19.37	19.38	19.86	20.43
12H	4H	20.10	20.77	20.58	21.25	21.72	17.69	18.36	18.17	18.84	19.31
	6H	20.47	21.03	20.98	21.54	22.03	18.42	18.98	18.93	19.49	19.98
	8H	20.63	21.12	21.14	21.62	22.18	18.75	19.25	19.26	19.74	20.31