

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: P1058199

Luminaire Tested: S122RDR-H1005D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058199
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H1005D830-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

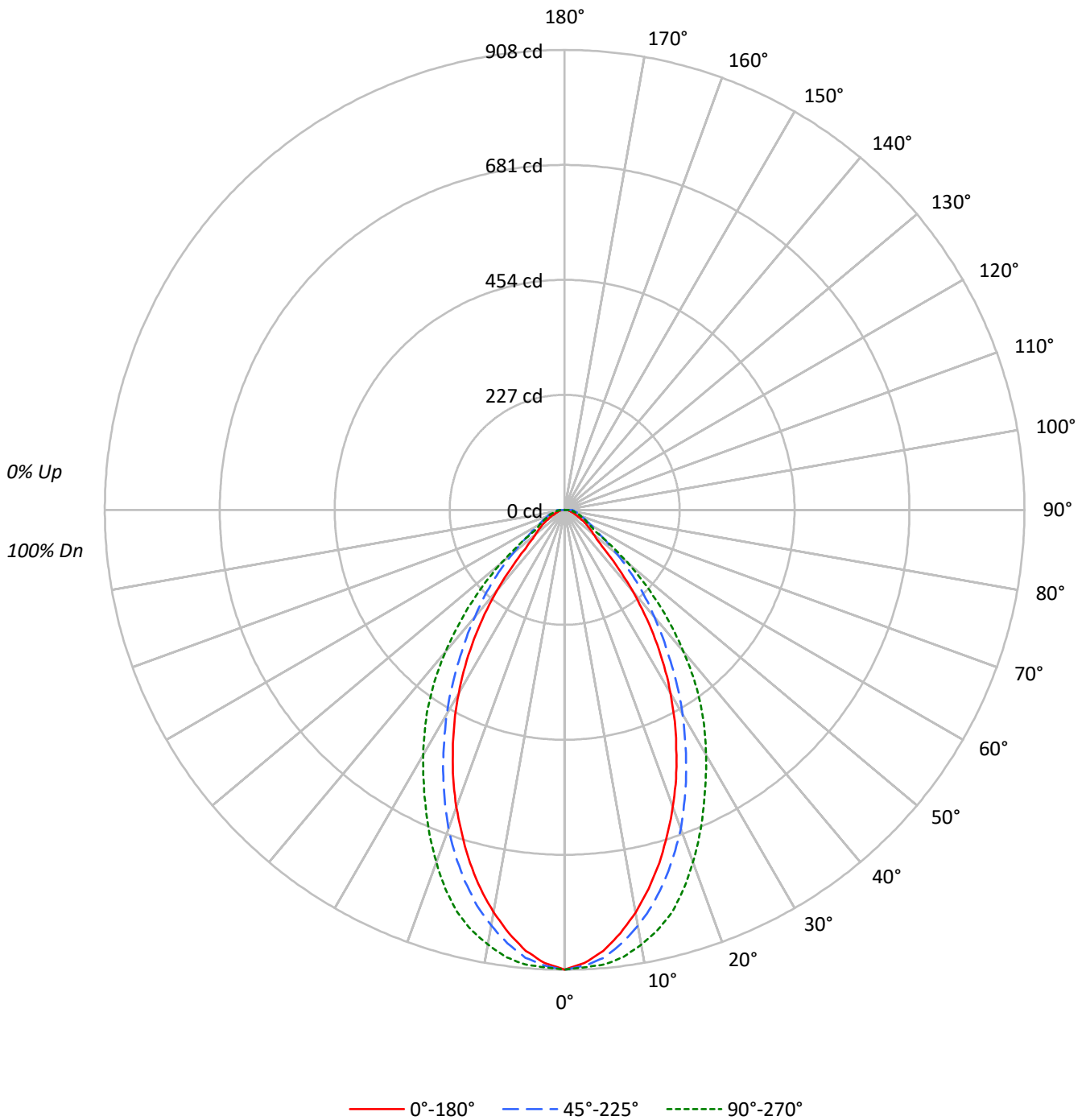
Lumens per Lamp: N/A
Luminaire Lumens: 1101.1 lumens
Efficiency: N/A
Efficacy: 30.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16751	16751	16751
5°	16191	16441	16691
10°	15115	15619	16328
15°	13787	14507	15693
20°	12265	13164	14543
25°	10628	11562	13210
30°	8911	9916	11900
35°	7019	8204	10545
40°	5003	6629	8807
45°	2957	5245	6829
50°	2130	3795	4648
55°	1779	2735	2342
60°	1443	2192	1993
65°	1179	1943	1825
70°	1020	1894	1748
75°	962	1925	1732
80°	999	2295	1860
85°	1419	3705	2287

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6829 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.3	7.6
10°-20°	213.9	19.4
20°-30°	263.9	24.0
30°-40°	234.7	21.3
40°-50°	149.8	13.6
50°-60°	71.9	6.5
60°-70°	42.2	3.8
70°-80°	27.0	2.4
80°-90°	14.4	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°	561.1	51.0
0°-40°	795.8	72.3
0°-60°	1017.6	92.4
0°-90°	1101.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1101.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	908	908	908	908	908	
5°	874	890	888	893	901	81
15°	722	739	759	794	822	201
25°	522	542	568	608	649	239
35°	312	336	364	420	468	194
45°	113	147	201	233	262	95
55°	55	72	85	82	73	50
65°	27	49	44	40	42	27
75°	14	30	27	26	24	15
85°	7	16	18	15	11	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	907.8	907.8	907.8	907.8	907.8
2.5°	895.7	910.5	901.1	901.1	903.8
5°	874.1	890.3	887.6	893.0	901.1
7.5°	843.1	860.6	863.3	878.1	890.3
10°	806.7	825.5	833.6	855.2	871.4
12.5°	766.2	785.1	799.9	826.9	849.8
15°	721.7	739.2	759.4	794.5	821.5
17.5°	673.1	696.0	716.3	752.7	783.7
20°	624.6	646.1	670.4	705.5	740.6
22.5°	574.6	594.9	619.2	655.6	696.0
25°	522.0	542.3	567.9	608.4	648.8
27.5°	470.8	491.0	515.3	559.8	603.0
30°	418.2	438.4	465.4	511.2	558.5
32.5°	365.6	387.1	414.1	464.0	513.9
35°	311.6	335.9	364.2	419.5	468.1
37.5°	259.0	283.3	318.3	372.3	418.2
40°	207.7	236.1	275.2	323.7	365.6
42.5°	157.8	188.8	237.4	276.5	313.0
45°	113.3	147.0	201.0	233.4	261.7
47.5°	86.3	110.6	165.9	191.5	211.8
50°	74.2	89.0	132.2	151.1	161.9
52.5°	64.7	78.2	105.2	114.7	114.7
55°	55.3	71.5	85.0	82.3	72.8
57.5°	47.2	64.7	70.1	59.4	62.1
60°	39.1	59.4	59.4	52.6	54.0
62.5°	32.4	55.3	51.3	45.9	47.2
65°	27.0	48.6	44.5	40.5	41.8
67.5°	21.6	43.2	39.1	36.4	36.4
70°	18.9	39.1	35.1	32.4	32.4
72.5°	16.2	33.7	31.0	28.3	28.3
75°	13.5	29.7	27.0	25.6	24.3
77.5°	12.1	25.6	24.3	21.6	20.2
80°	9.4	21.6	21.6	20.2	17.5
82.5°	8.1	18.9	18.9	17.5	14.8
85°	6.7	16.2	17.5	14.8	10.8
87.5°	5.4	14.8	14.8	12.1	8.1
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	11.46	12.74	11.83	13.05	13.36	11.26	12.54	11.62	12.85	13.16
	3H	12.69	13.83	13.07	14.16	14.52	12.85	13.98	13.23	14.31	14.68
	4H	13.15	14.21	13.55	14.56	14.94	13.57	14.62	13.97	14.97	15.36
	6H	13.53	14.50	13.94	14.87	15.26	14.21	15.19	14.63	15.56	15.95
	8H	13.68	14.60	14.11	14.99	15.40	14.54	15.46	14.97	15.86	16.26
	12H	13.84	14.72	14.27	15.10	15.53	14.84	15.72	15.27	16.11	16.54
4H	2H	12.01	13.07	12.41	13.42	13.80	11.85	12.91	12.25	13.26	13.64
	3H	13.71	14.58	14.12	14.98	15.39	13.69	14.56	14.10	14.96	15.37
	4H	14.50	15.28	14.94	15.70	16.15	14.56	15.34	14.99	15.76	16.20
	6H	15.14	15.82	15.61	16.27	16.74	15.40	16.08	15.86	16.52	16.99
	8H	15.39	16.03	15.86	16.47	16.95	15.82	16.46	16.29	16.90	17.38
	12H	15.64	16.20	16.13	16.68	17.16	16.22	16.78	16.71	17.27	17.74
8H	4H	14.92	15.55	15.39	16.00	16.47	14.98	15.61	15.45	16.06	16.53
	6H	15.90	16.42	16.40	16.91	17.40	16.06	16.58	16.56	17.08	17.56
	8H	16.39	16.86	16.91	17.37	17.86	16.65	17.12	17.17	17.63	18.12
	12H	16.89	17.30	17.41	17.80	18.37	17.25	17.66	17.77	18.16	18.73
12H	4H	14.99	15.55	15.47	16.03	16.51	15.05	15.61	15.54	16.09	16.57
	6H	16.07	16.53	16.59	17.05	17.54	16.22	16.69	16.75	17.21	17.70
	8H	16.70	17.12	17.22	17.61	18.18	16.93	17.35	17.45	17.84	18.41