

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: P1057797

Luminaire Tested: S122RDRP-S1005D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057797
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D830-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

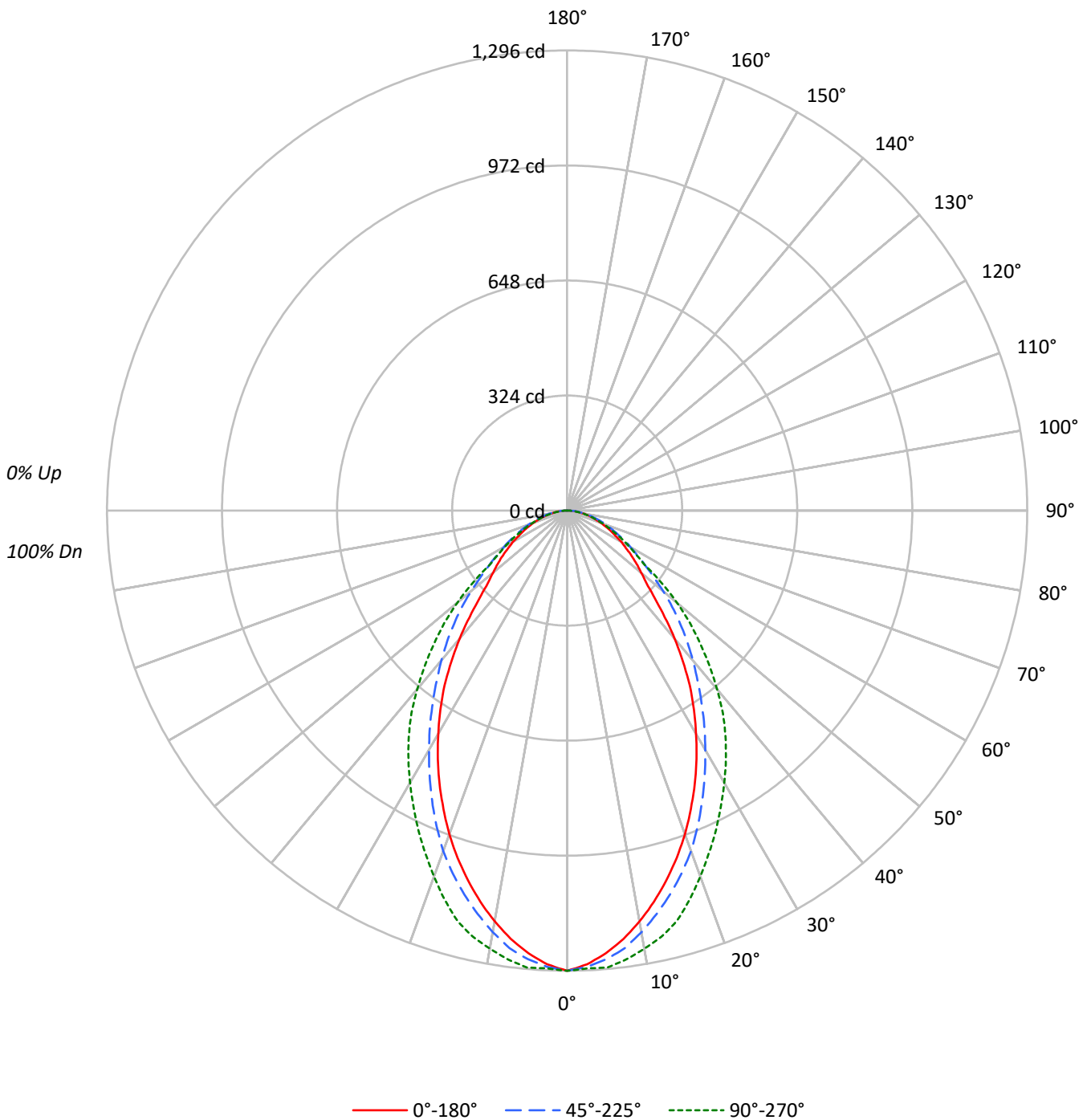
Lumens per Lamp: N/A
Luminaire Lumens: 2112.9 lumens
Efficiency: N/A
Efficacy: 50.5 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	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	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89					87				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78					76				
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68					67				
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61					59				
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54					52				
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49					47				
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44					43				
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41					39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37					36				
10	59	47	40	35	58	46	40	35	46	39	35	45	39	35	44	38	34					33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23916	23916	23916
5°	23181	23491	23930
10°	22012	22588	23476
15°	20607	21379	22842
20°	19048	20031	21538
25°	17308	18330	20203
30°	15471	16568	18855
35°	13561	14849	17516
40°	11345	13260	15811
45°	9092	11746	13820
50°	7803	10122	11600
55°	7129	8609	8564
60°	6481	7613	7458
65°	5903	6816	6510
70°	5411	6242	5789
75°	5069	5761	5069
80°	4739	5334	4442
85°	4721	5611	3832

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13820 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.6	5.7
10°-20°	316.8	15.0
20°-30°	417.8	19.8
30°-40°	420.7	19.9
40°-50°	342.4	16.2
50°-60°	233.5	11.0
60°-70°	151.5	7.2
70°-80°	83.4	3.9
80°-90°	27.2	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°	854.2	40.4
0°-40°	1274.9	60.3
0°-60°	1850.8	87.6
0°-90°	2112.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2112.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1296	1296	1296	1296	1296	
5°	1252	1275	1268	1279	1292	117
15°	1079	1106	1119	1165	1196	302
25°	850	878	900	941	992	390
35°	602	633	659	716	778	374
45°	348	392	450	489	530	275
55°	222	244	268	269	266	198
65°	135	160	156	148	149	134
75°	71	88	81	72	71	75
85°	22	29	26	21	18	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1296.1	1296.1	1296.1	1296.1	1296.1
2.5°	1279.3	1300.2	1286.3	1287.7	1290.5
5°	1251.5	1275.2	1268.2	1279.3	1291.9
7.5°	1216.6	1240.3	1243.1	1259.8	1275.2
10°	1174.8	1201.3	1205.5	1230.6	1252.9
12.5°	1128.8	1158.1	1163.7	1199.9	1229.2
15°	1078.7	1106.5	1119.1	1165.1	1195.7
17.5°	1025.7	1052.2	1071.7	1113.5	1148.3
20°	970.0	995.0	1020.1	1057.7	1096.8
22.5°	910.0	937.9	961.6	999.2	1043.8
25°	850.1	878.0	900.3	940.7	992.3
27.5°	788.8	816.7	839.0	882.2	937.9
30°	726.1	755.3	777.6	826.4	884.9
32.5°	664.8	694.0	719.1	770.7	832.0
35°	602.0	632.7	659.2	716.3	777.6
37.5°	535.1	570.0	603.4	660.6	720.5
40°	471.0	510.1	550.5	603.4	656.4
42.5°	406.9	450.1	500.3	544.9	593.7
45°	348.4	391.6	450.1	489.2	529.6
47.5°	302.4	338.6	401.4	433.4	469.6
50°	271.8	296.8	352.6	377.7	404.1
52.5°	246.7	267.6	306.6	323.3	337.3
55°	221.6	243.9	267.6	269.0	266.2
57.5°	196.5	221.6	234.1	224.4	229.9
60°	175.6	200.7	206.3	196.5	202.1
62.5°	153.3	181.2	181.2	171.4	174.2
65°	135.2	160.3	156.1	147.7	149.1
67.5°	117.1	142.1	135.2	126.8	126.8
70°	100.3	124.0	115.7	107.3	107.3
72.5°	85.0	104.5	98.9	89.2	87.8
75°	71.1	87.8	80.8	72.5	71.1
77.5°	57.1	71.1	65.5	58.5	55.7
80°	44.6	57.1	50.2	44.6	41.8
82.5°	33.4	43.2	37.6	32.1	29.3
85°	22.3	29.3	26.5	20.9	18.1
87.5°	11.1	19.5	16.7	13.9	11.1
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	17.75	19.19	18.11	19.50	19.82	18.00	19.43	18.36	19.75	20.06
	3H	19.28	20.56	19.65	20.89	21.25	19.35	20.64	19.73	20.97	21.33
	4H	19.84	21.04	20.24	21.39	21.77	19.84	21.04	20.24	21.39	21.77
	6H	20.26	21.37	20.68	21.74	22.13	20.18	21.29	20.60	21.66	22.06
	8H	20.41	21.47	20.84	21.86	22.26	20.29	21.35	20.72	21.74	22.14
	12H	20.53	21.54	20.96	21.92	22.35	20.36	21.37	20.79	21.75	22.18
4H	2H	18.32	19.53	18.72	19.88	20.26	18.52	19.72	18.92	20.07	20.45
	3H	20.12	21.12	20.54	21.52	21.93	20.09	21.09	20.51	21.49	21.90
	4H	20.87	21.76	21.30	22.18	22.62	20.69	21.59	21.12	22.00	22.44
	6H	21.45	22.23	21.91	22.68	23.14	21.16	21.94	21.62	22.38	22.84
	8H	21.66	22.39	22.13	22.84	23.30	21.31	22.04	21.77	22.48	22.95
	12H	21.83	22.48	22.31	22.96	23.43	21.42	22.07	21.90	22.55	23.02
8H	4H	21.13	21.86	21.60	22.31	22.77	20.98	21.71	21.44	22.15	22.62
	6H	21.89	22.49	22.39	22.98	23.46	21.57	22.17	22.07	22.66	23.14
	8H	22.21	22.75	22.73	23.26	23.75	21.79	22.33	22.31	22.84	23.33
	12H	22.49	22.97	23.00	23.46	24.03	21.97	22.45	22.49	22.94	23.51
12H	4H	21.15	21.79	21.63	22.27	22.75	21.01	21.66	21.50	22.14	22.61
	6H	21.93	22.47	22.45	22.98	23.47	21.64	22.18	22.15	22.69	23.18
	8H	22.33	22.81	22.84	23.30	23.87	21.92	22.40	22.43	22.89	23.46