

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: P1057797

Luminaire Tested: S122RDR-S1005D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S122RDR-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

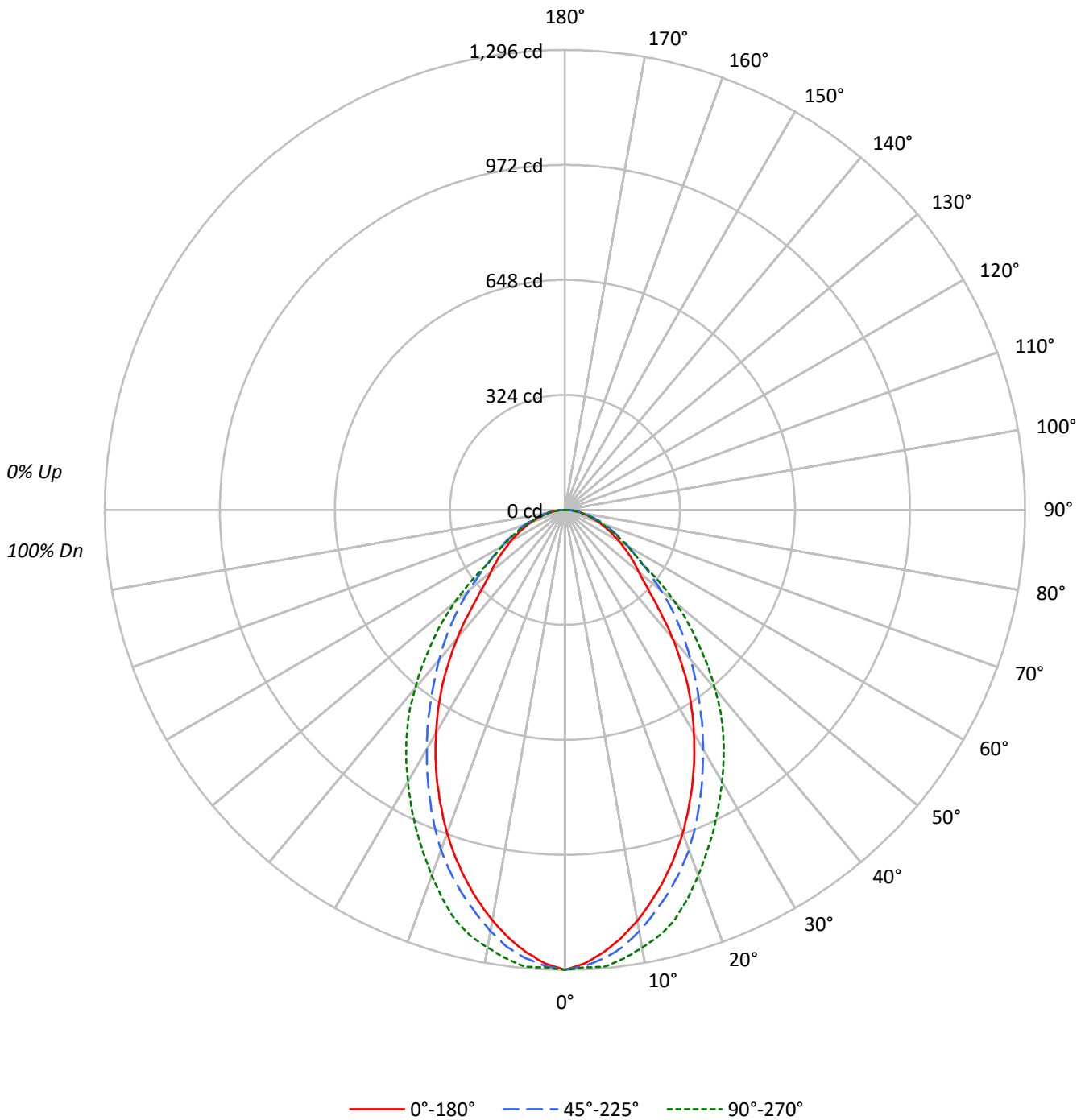
Lumens per Lamp: N/A
Luminaire Lumens: 2112.9 lumens
Efficiency: N/A
Efficacy: 50.5 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (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: P1057797

CATALOG NUMBER: S122RDR-S1005D830-X4F0-XX-UDD-WVL-W

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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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

(END OF REPORT)