

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: P1057800

Luminaire Tested: S122RDRP-S1005D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057800
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D835-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

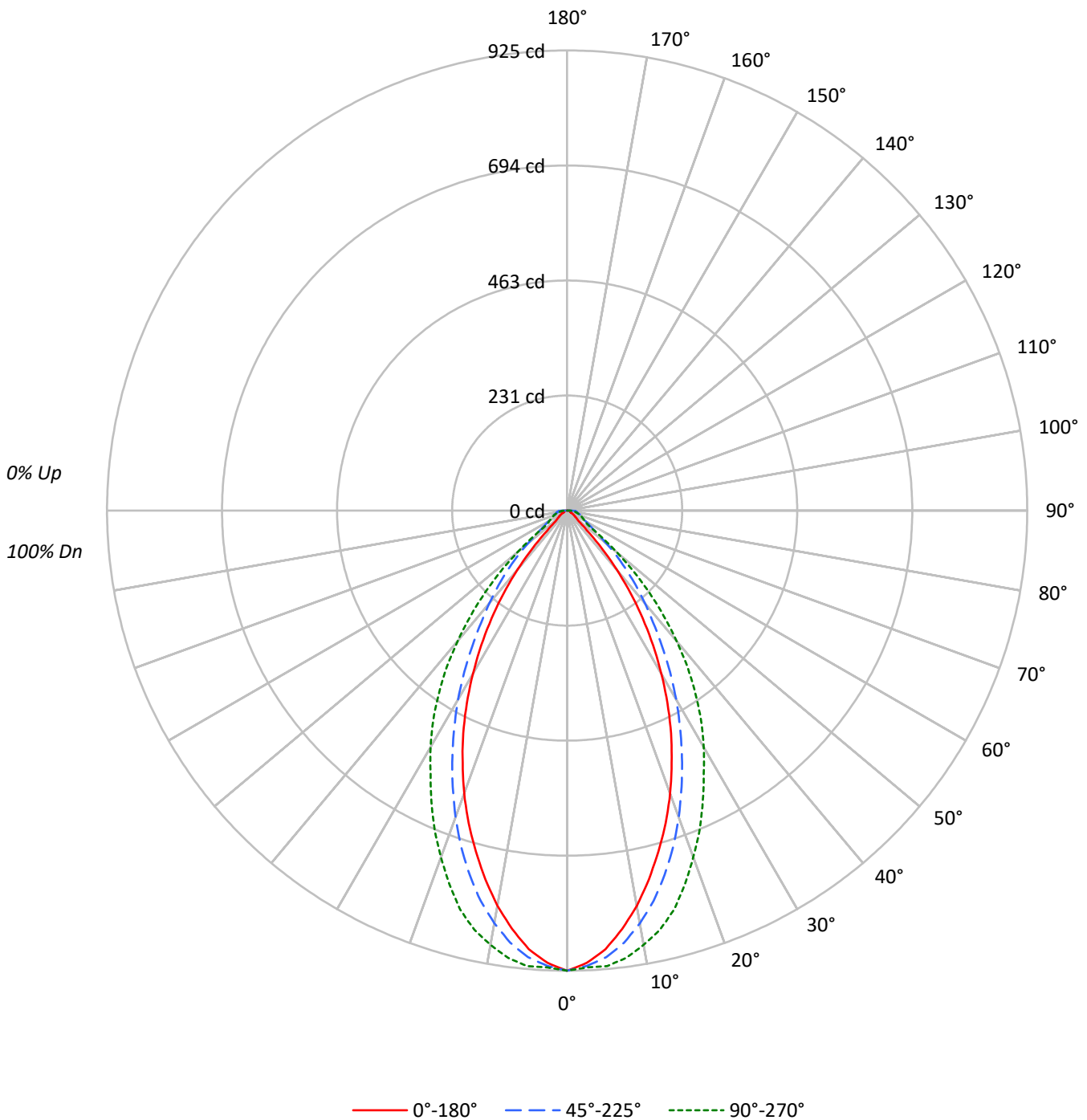
Lumens per Lamp: N/A
Luminaire Lumens: 1006.7 lumens
Efficiency: N/A
Efficacy: 24.1 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	97	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17067	17067	17067
5°	16391	16693	17023
10°	15111	15777	16609
15°	13540	14475	15860
20°	11884	12874	14559
25°	10064	11119	13136
30°	8071	9332	11698
35°	5967	7467	10135
40°	3743	5846	8233
45°	1467	4402	6101
50°	723	2974	3738
55°	573	1953	1666
60°	435	1583	1528
65°	323	1485	1485
70°	399	1516	1516
75°	421	1690	1583
80°	627	2200	1732
85°	1249	3769	2498

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 6895 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.5	8.4
10°-20°	213.6	21.2
20°-30°	255.5	25.4
30°-40°	215.0	21.4
40°-50°	122.4	12.2
50°-60°	48.3	4.8
60°-70°	30.4	3.0
70°-80°	22.6	2.2
80°-90°	14.4	1.4
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°	553.5	55.0
0°-40°	768.6	76.3
0°-60°	939.3	93.3
0°-90°	1006.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1006.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	925	925	925	925	925	
5°	885	904	901	912	919	82
15°	709	734	758	802	830	198
25°	494	516	546	602	645	225
35°	265	289	332	402	450	164
45°	56	99	169	212	234	53
55°	18	38	61	62	52	16
65°	7	34	34	33	34	8
75°	6	24	24	22	22	6
85°	6	16	18	16	12	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	924.9	924.9	924.9	924.9	924.9
2.5°	910.1	926.4	916.0	917.5	919.0
5°	884.9	904.2	901.2	911.6	919.0
7.5°	847.9	868.7	876.0	893.8	907.1
10°	806.5	830.2	842.0	870.1	886.4
12.5°	759.1	785.8	803.5	839.1	862.7
15°	708.8	734.0	757.7	802.1	830.2
17.5°	658.5	683.7	708.8	757.7	787.3
20°	605.2	628.9	655.6	707.4	741.4
22.5°	549.0	574.2	600.8	654.1	695.5
25°	494.3	516.5	546.1	602.3	645.2
27.5°	436.5	458.7	491.3	549.0	594.9
30°	378.8	401.0	438.0	497.2	549.0
32.5°	321.1	344.8	384.8	449.9	501.7
35°	264.9	288.6	331.5	402.5	449.9
37.5°	210.1	236.8	284.1	353.7	398.1
40°	155.4	186.5	242.7	304.8	341.8
42.5°	103.6	142.1	204.2	256.0	287.1
45°	56.2	99.1	168.7	211.6	233.8
47.5°	31.1	63.6	134.7	168.7	182.0
50°	25.2	44.4	103.6	128.7	130.2
52.5°	20.7	40.0	77.0	91.7	84.3
55°	17.8	38.5	60.7	62.2	51.8
57.5°	14.8	37.0	50.3	44.4	44.4
60°	11.8	37.0	42.9	40.0	41.4
62.5°	8.9	37.0	38.5	35.5	37.0
65°	7.4	34.0	34.0	32.6	34.0
67.5°	7.4	31.1	31.1	29.6	31.1
70°	7.4	29.6	28.1	28.1	28.1
72.5°	5.9	26.6	26.6	25.2	25.2
75°	5.9	23.7	23.7	22.2	22.2
77.5°	5.9	22.2	22.2	20.7	19.2
80°	5.9	19.2	20.7	19.2	16.3
82.5°	5.9	17.8	19.2	17.8	13.3
85°	5.9	16.3	17.8	16.3	11.8
87.5°	4.4	16.3	16.3	13.3	8.9
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	7.55	8.77	7.91	9.08	9.40	9.57	10.80	9.94	11.11	11.42
	3H	9.09	10.18	9.47	10.51	10.88	11.55	12.63	11.93	12.96	13.33
	4H	9.65	10.66	10.05	11.01	11.40	12.46	13.47	12.87	13.83	14.21
	6H	10.20	11.13	10.62	11.50	11.90	13.34	14.27	13.76	14.65	15.04
	8H	10.50	11.38	10.93	11.77	12.17	13.75	14.63	14.18	15.02	15.43
	12H	10.85	11.70	11.29	12.08	12.51	14.19	15.03	14.62	15.41	15.84
4H	2H	8.73	9.74	9.14	10.10	10.48	10.19	11.20	10.60	11.56	11.94
	3H	10.93	11.77	11.35	12.17	12.58	12.44	13.27	12.85	13.68	14.08
	4H	11.99	12.74	12.42	13.16	13.60	13.51	14.26	13.95	14.68	15.12
	6H	12.88	13.53	13.35	13.98	14.44	14.62	15.27	15.08	15.71	16.18
	8H	13.27	13.87	13.74	14.32	14.79	15.14	15.75	15.61	16.20	16.67
	12H	13.69	14.22	14.17	14.71	15.18	15.72	16.25	16.20	16.74	17.21
8H	4H	12.79	13.40	13.26	13.84	14.32	14.00	14.61	14.47	15.06	15.53
	6H	14.17	14.67	14.67	15.16	15.65	15.40	15.89	15.90	16.39	16.87
	8H	14.89	15.34	15.41	15.85	16.35	16.14	16.58	16.66	17.10	17.59
	12H	15.64	16.04	16.16	16.53	17.10	16.97	17.36	17.49	17.86	18.43
12H	4H	12.95	13.49	13.44	13.97	14.45	14.10	14.64	14.59	15.12	15.60
	6H	14.50	14.95	15.02	15.46	15.96	15.61	16.06	16.14	16.58	17.07
	8H	15.42	15.81	15.93	16.31	16.88	16.50	16.89	17.02	17.39	17.96