

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: P1058263

Luminaire Tested: S122RDR-H1005D940-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058263
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H1005D940-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

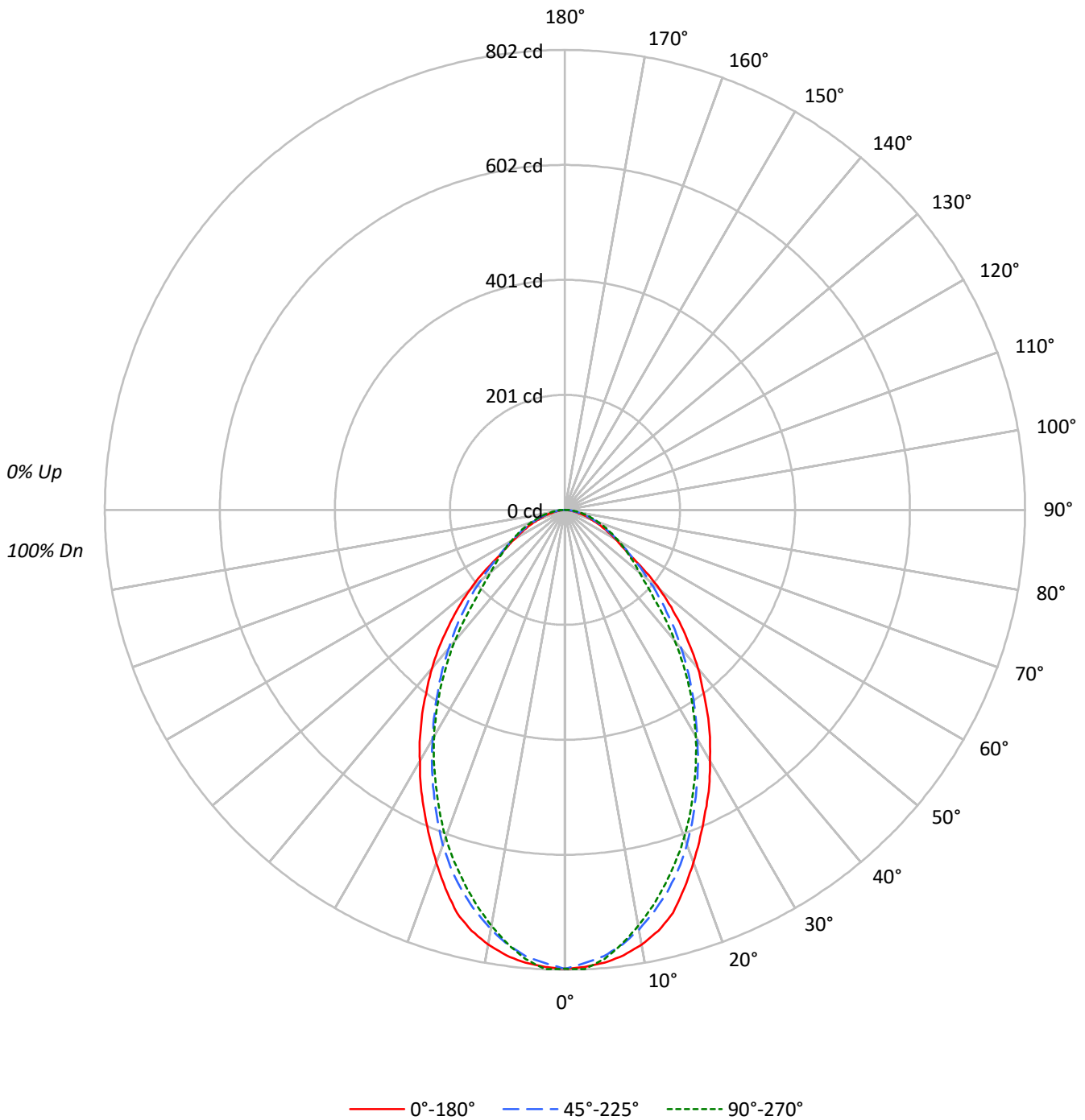
Lumens per Lamp: N/A
Luminaire Lumens: 1215.5 lumens
Efficiency: N/A
Efficacy: 33.3 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14768	14768	14768
5°	14683	14470	14565
10°	14422	13922	13802
15°	13902	13170	12902
20°	12862	12212	11937
25°	11805	11027	10819
30°	10779	9829	9720
35°	9761	8697	8497
40°	8689	7583	7183
45°	7482	6519	5754
50°	6183	5489	4829
55°	4469	4552	4346
60°	3716	3905	3949
65°	3170	3393	3615
70°	2611	3027	3302
75°	2182	2545	3002
80°	1626	2030	2710
85°	529	1080	2435

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7482 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.0	6.1
10°-20°	194.8	16.0
20°-30°	252.1	20.7
30°-40°	247.3	20.3
40°-50°	194.7	16.0
50°-60°	127.6	10.5
60°-70°	77.7	6.4
70°-80°	38.8	3.2
80°-90°	8.3	0.7
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°	520.9	42.9
0°-40°	768.2	63.2
0°-60°	1090.6	89.7
0°-90°	1215.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1215.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	800	800	800	800	800	
5°	793	793	781	786	786	75
15°	728	718	689	680	675	203
25°	580	561	542	539	531	267
35°	433	409	386	385	377	270
45°	287	269	250	232	220	221
55°	139	147	142	136	135	132
65°	73	74	78	82	83	72
75°	31	32	36	41	42	33
85°	2	4	5	9	12	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	800.3	800.3	800.3	800.3	800.3
2.5°	797.8	799.0	791.4	799.0	801.6
5°	792.7	792.7	781.2	786.3	786.3
7.5°	783.8	782.5	764.6	764.6	763.4
10°	769.7	764.6	743.0	739.1	736.6
12.5°	751.9	743.0	717.5	711.1	707.3
15°	727.7	717.5	689.4	680.5	675.4
17.5°	692.0	681.8	657.6	647.4	642.3
20°	655.0	639.7	621.9	613.0	607.9
22.5°	616.8	599.0	582.4	576.0	570.9
25°	579.8	560.7	541.6	539.1	531.4
27.5°	544.2	521.2	502.1	500.8	494.5
30°	505.9	481.7	461.3	462.6	456.2
32.5°	470.3	447.3	423.1	424.4	416.7
35°	433.3	409.1	386.1	384.9	377.2
37.5°	395.1	372.1	350.5	345.4	337.7
40°	360.7	337.7	314.8	305.9	298.2
42.5°	323.7	303.3	282.9	268.9	258.7
45°	286.7	268.9	249.8	231.9	220.5
47.5°	251.1	237.0	220.5	198.8	191.2
50°	215.4	205.2	191.2	172.0	168.2
52.5°	178.4	174.6	165.7	152.9	151.7
55°	138.9	146.6	141.5	136.4	135.1
57.5°	117.2	118.5	122.3	121.1	121.1
60°	100.7	100.7	105.8	107.0	107.0
62.5°	85.4	86.7	91.8	94.3	94.3
65°	72.6	73.9	77.7	81.6	82.8
67.5°	59.9	62.4	66.3	70.1	71.4
70°	48.4	51.0	56.1	59.9	61.2
72.5°	39.5	40.8	45.9	49.7	51.0
75°	30.6	31.9	35.7	40.8	42.1
77.5°	21.7	24.2	28.0	31.9	34.4
80°	15.3	16.6	19.1	24.2	25.5
82.5°	8.9	10.2	12.7	16.6	17.8
85°	2.5	3.8	5.1	8.9	11.5
87.5°	0.0	0.0	0.0	2.5	5.1
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	15.48	16.87	15.84	17.19	17.50	15.66	17.05	16.02	17.37	17.68
	3H	16.61	17.85	16.99	18.18	18.55	17.12	18.36	17.50	18.69	19.06
	4H	16.96	18.12	17.36	18.47	18.85	17.66	18.82	18.06	19.17	19.55
	6H	17.14	18.22	17.56	18.58	18.98	18.07	19.14	18.49	19.51	19.91
	8H	17.17	18.19	17.60	18.58	18.98	18.20	19.22	18.63	19.61	20.01
	12H	17.16	18.13	17.59	18.51	18.94	18.28	19.26	18.71	19.64	20.07
4H	2H	15.93	17.10	16.33	17.45	17.83	16.08	17.25	16.49	17.60	17.98
	3H	17.27	18.23	17.69	18.63	19.04	17.76	18.71	18.17	19.12	19.52
	4H	17.72	18.58	18.15	18.99	19.44	18.42	19.28	18.86	19.70	20.14
	6H	17.99	18.73	18.45	19.18	19.64	18.96	19.70	19.42	20.14	20.61
	8H	18.03	18.73	18.50	19.17	19.64	19.12	19.82	19.59	20.26	20.73
	12H	18.03	18.64	18.51	19.13	19.60	19.25	19.86	19.73	20.34	20.82
8H	4H	17.93	18.63	18.40	19.07	19.54	18.57	19.26	19.04	19.71	20.18
	6H	18.28	18.85	18.78	19.34	19.82	19.20	19.77	19.70	20.27	20.75
	8H	18.36	18.87	18.88	19.38	19.87	19.44	19.95	19.95	20.46	20.95
	12H	18.37	18.82	18.89	19.32	19.89	19.62	20.07	20.13	20.56	21.13
12H	4H	17.94	18.56	18.43	19.04	19.51	18.56	19.17	19.04	19.65	20.13
	6H	18.30	18.81	18.82	19.33	19.82	19.20	19.71	19.71	20.22	20.71
	8H	18.42	18.87	18.93	19.36	19.93	19.47	19.92	19.98	20.42	20.98