

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: P1057809

Luminaire Tested: S122RDRP-S1005D840-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057809
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-S1005D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

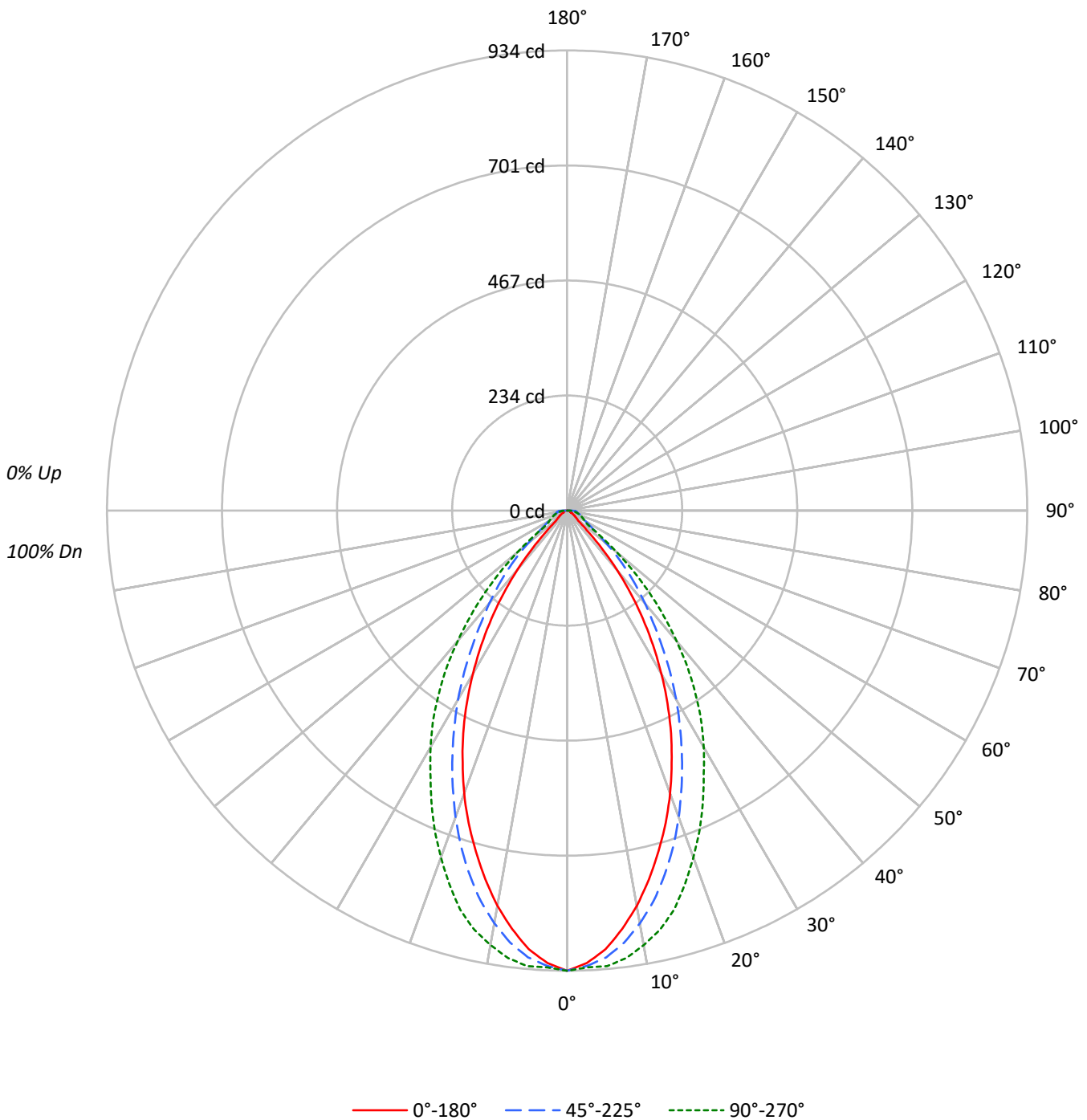
Lumens per Lamp: N/A
Luminaire Lumens: 1016.6 lumens
Efficiency: N/A
Efficacy: 24.3 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	17235	17235	17235
5°	16554	16858	17189
10°	15261	15932	16773
15°	13674	14616	16016
20°	12002	12999	14702
25°	10162	11227	13267
30°	8152	9424	11813
35°	6026	7540	10234
40°	3779	5904	8315
45°	1482	4447	6161
50°	729	3003	3775
55°	576	1972	1683
60°	443	1598	1543
65°	327	1502	1502
70°	405	1532	1532
75°	428	1704	1597
80°	638	2221	1743
85°	1270	3790	2541

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 6938 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.3	8.4
10°-20°	215.7	21.2
20°-30°	258.0	25.4
30°-40°	217.2	21.4
40°-50°	123.6	12.2
50°-60°	48.8	4.8
60°-70°	30.7	3.0
70°-80°	22.8	2.2
80°-90°	14.5	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°	559.0	55.0
0°-40°	776.1	76.3
0°-60°	948.5	93.3
0°-90°	1016.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1016.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	934	934	934	934	934	
5°	894	913	910	921	928	83
15°	716	741	765	810	838	200
25°	499	522	551	608	652	227
35°	268	291	335	406	454	166
45°	57	100	170	214	236	54
55°	18	39	61	63	52	16
65°	8	34	34	33	34	8
75°	6	24	24	22	22	7
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°	934.0	934.0	934.0	934.0	934.0
2.5°	919.1	935.5	925.0	926.5	928.0
5°	893.7	913.1	910.1	920.6	928.0
7.5°	856.3	877.2	884.7	902.6	916.1
10°	814.5	838.4	850.3	878.7	895.2
12.5°	766.6	793.5	811.5	847.3	871.2
15°	715.8	741.2	765.1	810.0	838.4
17.5°	665.0	690.4	715.8	765.1	795.0
20°	611.2	635.1	662.0	714.3	748.7
22.5°	554.4	579.8	606.7	660.5	702.4
25°	499.1	521.6	551.4	608.2	651.6
27.5°	440.9	463.3	496.1	554.4	600.8
30°	382.6	405.0	442.3	502.1	554.4
32.5°	324.3	348.2	388.5	454.3	506.6
35°	267.5	291.4	334.7	406.5	454.3
37.5°	212.2	239.1	286.9	357.2	402.0
40°	156.9	188.3	245.1	307.8	345.2
42.5°	104.6	143.5	206.2	258.5	289.9
45°	56.8	100.1	170.4	213.7	236.1
47.5°	31.4	64.3	136.0	170.4	183.8
50°	25.4	44.8	104.6	130.0	131.5
52.5°	20.9	40.3	77.7	92.7	85.2
55°	17.9	38.9	61.3	62.8	52.3
57.5°	14.9	37.4	50.8	44.8	44.8
60°	12.0	37.4	43.3	40.3	41.8
62.5°	9.0	37.4	38.9	35.9	37.4
65°	7.5	34.4	34.4	32.9	34.4
67.5°	7.5	31.4	31.4	29.9	31.4
70°	7.5	29.9	28.4	28.4	28.4
72.5°	6.0	26.9	26.9	25.4	25.4
75°	6.0	23.9	23.9	22.4	22.4
77.5°	6.0	22.4	22.4	20.9	19.4
80°	6.0	19.4	20.9	19.4	16.4
82.5°	6.0	17.9	19.4	17.9	13.4
85°	6.0	16.4	17.9	16.4	12.0
87.5°	4.5	16.4	16.4	13.4	9.0
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	7.59	8.81	7.95	9.12	9.44	9.60	10.82	9.97	11.14	11.45
	3H	9.13	10.22	9.51	10.55	10.92	11.58	12.66	11.96	12.99	13.36
	4H	9.69	10.70	10.09	11.05	11.44	12.49	13.50	12.90	13.86	14.24
	6H	10.25	11.18	10.66	11.55	11.94	13.37	14.30	13.79	14.68	15.07
	8H	10.54	11.42	10.97	11.81	12.22	13.78	14.66	14.21	15.05	15.45
	12H	10.90	11.74	11.33	12.13	12.56	14.22	15.06	14.65	15.44	15.87
4H	2H	8.77	9.79	9.18	10.14	10.52	10.22	11.24	10.63	11.59	11.97
	3H	10.97	11.81	11.39	12.21	12.62	12.47	13.31	12.89	13.71	14.11
	4H	12.03	12.77	12.46	13.19	13.64	13.54	14.29	13.98	14.71	15.15
	6H	12.92	13.57	13.38	14.01	14.48	14.65	15.30	15.11	15.74	16.21
	8H	13.31	13.91	13.78	14.36	14.83	15.17	15.78	15.64	16.22	16.70
	12H	13.73	14.26	14.21	14.75	15.22	15.75	16.28	16.24	16.77	17.24
8H	4H	12.83	13.43	13.30	13.88	14.35	14.03	14.64	14.50	15.09	15.56
	6H	14.21	14.70	14.71	15.20	15.68	15.43	15.92	15.93	16.42	16.90
	8H	14.92	15.37	15.45	15.89	16.38	16.17	16.61	16.69	17.13	17.62
	12H	15.67	16.07	16.19	16.56	17.14	17.00	17.39	17.51	17.89	18.46
12H	4H	12.99	13.52	13.48	14.01	14.48	14.13	14.67	14.62	15.15	15.63
	6H	14.54	14.98	15.06	15.50	15.99	15.64	16.09	16.17	16.61	17.10
	8H	15.45	15.84	15.97	16.34	16.91	16.53	16.92	17.04	17.42	17.99