

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: P1059135

Luminaire Tested: S123RDRP-S1165D930-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059135
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1165D930-X4F0-XX-UDD-SVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

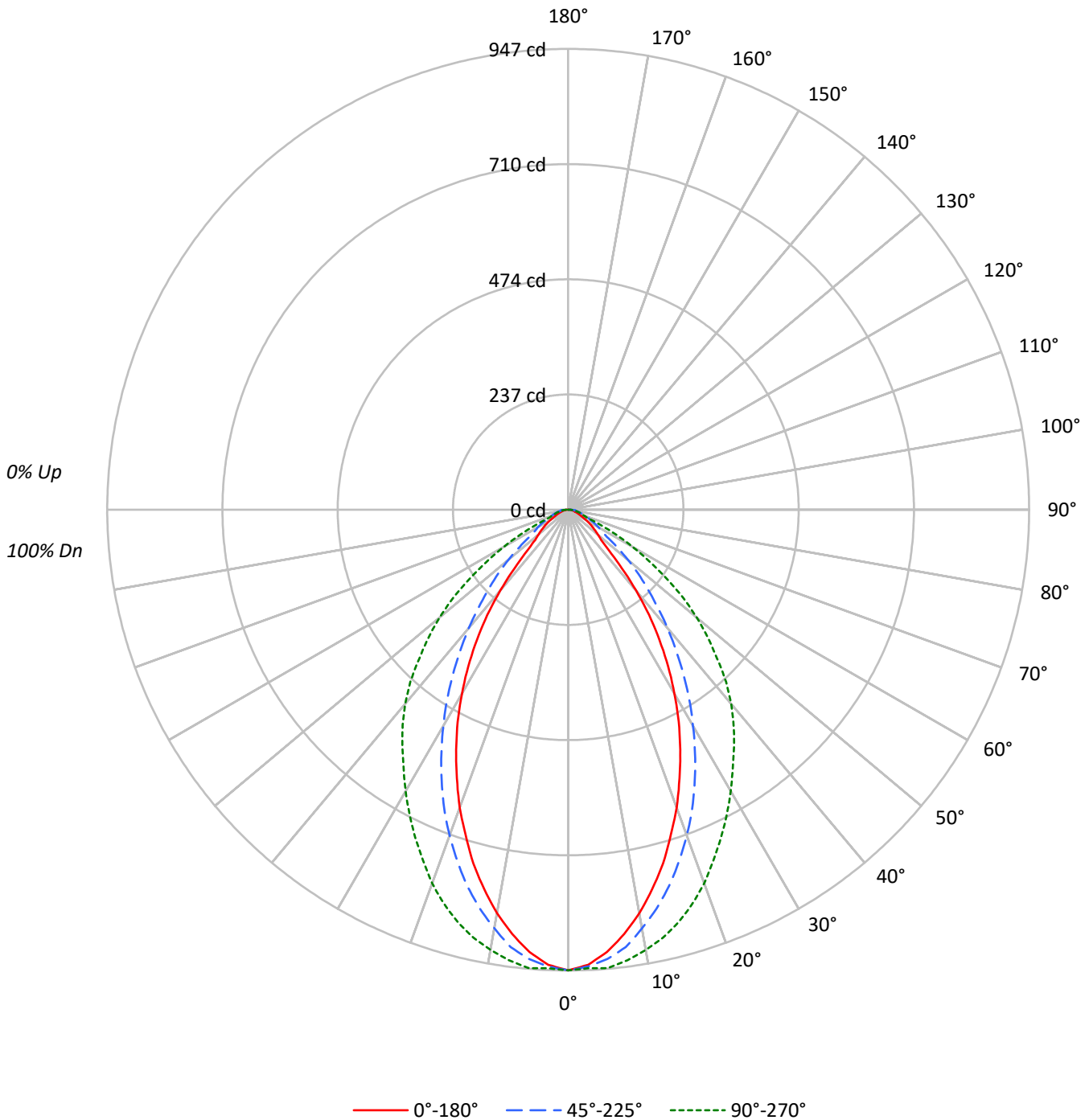
Lumens per Lamp: N/A
Luminaire Lumens: 1270.7 lumens
Efficiency: N/A
Efficacy: 30.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

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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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11115	11115	11115
5°	10756	10922	11144
10°	10038	10418	10951
15°	9149	9735	10664
20°	8140	8905	10212
25°	7053	7968	9629
30°	5916	6952	9056
35°	4686	5916	8512
40°	3317	4867	7985
45°	1953	3848	7186
50°	1461	2921	6293
55°	1228	1974	5055
60°	993	1684	3591
65°	784	1436	1895
70°	687	1253	1171
75°	640	1175	1121
80°	636	1271	1116
85°	795	1900	1428

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7186 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.1	6.9
10°-20°	226.4	17.8
20°-30°	288.3	22.7
30°-40°	271.2	21.3
40°-50°	195.3	15.4
50°-60°	112.8	8.9
60°-70°	51.6	4.1
70°-80°	25.8	2.0
80°-90°	12.2	1.0
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°	601.9	47.4
0°-40°	873.1	68.7
0°-60°	1181.2	93.0
0°-90°	1270.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1270.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	947	947	947	947	947	
5°	912	928	927	936	945	85
15°	753	780	801	846	877	210
25°	544	573	615	683	743	249
35°	327	355	413	508	594	203
45°	118	147	232	348	433	99
55°	60	62	96	183	247	54
65°	28	40	52	58	68	29
75°	14	27	26	25	25	15
85°	6	13	14	13	11	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	946.6	946.6	946.6	946.6	946.6
2.5°	936.0	947.8	939.5	940.7	943.1
5°	912.5	927.8	926.6	936.0	945.4
7.5°	879.6	897.2	906.6	920.7	933.7
10°	841.9	861.9	873.7	899.6	918.4
12.5°	798.4	824.3	839.6	873.7	900.7
15°	752.6	779.6	800.8	845.5	877.2
17.5°	700.8	730.2	757.3	810.2	849.0
20°	651.4	679.7	712.6	770.2	817.2
22.5°	597.4	627.9	665.6	726.7	779.6
25°	544.4	572.7	615.0	683.2	743.2
27.5°	491.5	519.7	564.4	639.7	705.5
30°	436.3	465.7	512.7	596.2	667.9
32.5°	382.2	410.4	463.3	553.8	629.1
35°	326.9	355.1	412.7	508.0	593.8
37.5°	272.8	302.2	363.3	470.4	558.5
40°	216.4	248.1	317.5	431.6	520.9
42.5°	163.4	197.5	271.6	391.6	479.8
45°	117.6	147.0	231.7	348.1	432.7
47.5°	91.7	107.0	195.2	303.4	389.2
50°	80.0	82.3	159.9	262.2	344.5
52.5°	69.4	71.7	125.8	223.4	297.5
55°	60.0	62.3	96.4	183.4	246.9
57.5°	50.6	54.1	80.0	145.8	198.7
60°	42.3	47.0	71.7	111.7	152.9
62.5°	34.1	42.3	61.1	82.3	109.4
65°	28.2	40.0	51.7	57.6	68.2
67.5°	23.5	36.5	43.5	41.2	40.0
70°	20.0	32.9	36.5	32.9	34.1
72.5°	16.5	30.6	30.6	28.2	28.2
75°	14.1	27.0	25.9	24.7	24.7
77.5°	11.8	23.5	22.3	21.2	20.0
80°	9.4	18.8	18.8	17.6	16.5
82.5°	8.2	15.3	15.3	15.3	12.9
85°	5.9	12.9	14.1	12.9	10.6
87.5°	4.7	11.8	11.8	10.6	7.1
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	8.34	9.66	8.70	9.97	10.29	15.70	17.02	16.07	17.33	17.65
	3H	9.73	10.90	10.11	11.23	11.59	15.93	17.10	16.31	17.43	17.80
	4H	10.28	11.37	10.68	11.72	12.10	16.05	17.14	16.45	17.49	17.87
	6H	10.72	11.72	11.13	12.09	12.48	16.16	17.16	16.58	17.53	17.93
	8H	10.89	11.84	11.32	12.23	12.64	16.21	17.16	16.64	17.55	17.96
	12H	11.05	11.95	11.48	12.34	12.77	16.27	17.18	16.70	17.56	17.99
4H	2H	9.44	10.53	9.84	10.88	11.26	15.66	16.75	16.06	17.10	17.48
	3H	11.10	11.99	11.51	12.40	12.80	16.02	16.91	16.43	17.32	17.72
	4H	11.91	12.71	12.34	13.13	13.57	16.22	17.01	16.65	17.43	17.88
	6H	12.54	13.24	13.01	13.68	14.15	16.44	17.13	16.91	17.58	18.05
	8H	12.78	13.43	13.25	13.87	14.34	16.55	17.19	17.02	17.64	18.11
	12H	12.99	13.56	13.48	14.05	14.52	16.68	17.25	17.16	17.73	18.20
8H	4H	12.35	13.00	12.82	13.44	13.92	16.25	16.90	16.72	17.35	17.82
	6H	13.26	13.79	13.76	14.29	14.77	16.58	17.11	17.08	17.61	18.09
	8H	13.68	14.16	14.20	14.67	15.16	16.77	17.25	17.29	17.76	18.26
	12H	14.10	14.52	14.61	15.02	15.59	17.02	17.44	17.53	17.94	18.51
12H	4H	12.41	12.98	12.89	13.46	13.94	16.24	16.81	16.73	17.30	17.77
	6H	13.40	13.87	13.92	14.39	14.88	16.60	17.07	17.12	17.59	18.08
	8H	13.94	14.36	14.45	14.85	15.42	16.85	17.28	17.37	17.77	18.34