

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: P1059126

Luminaire Tested: S123RDRP-S1165D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059126
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-S1165D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

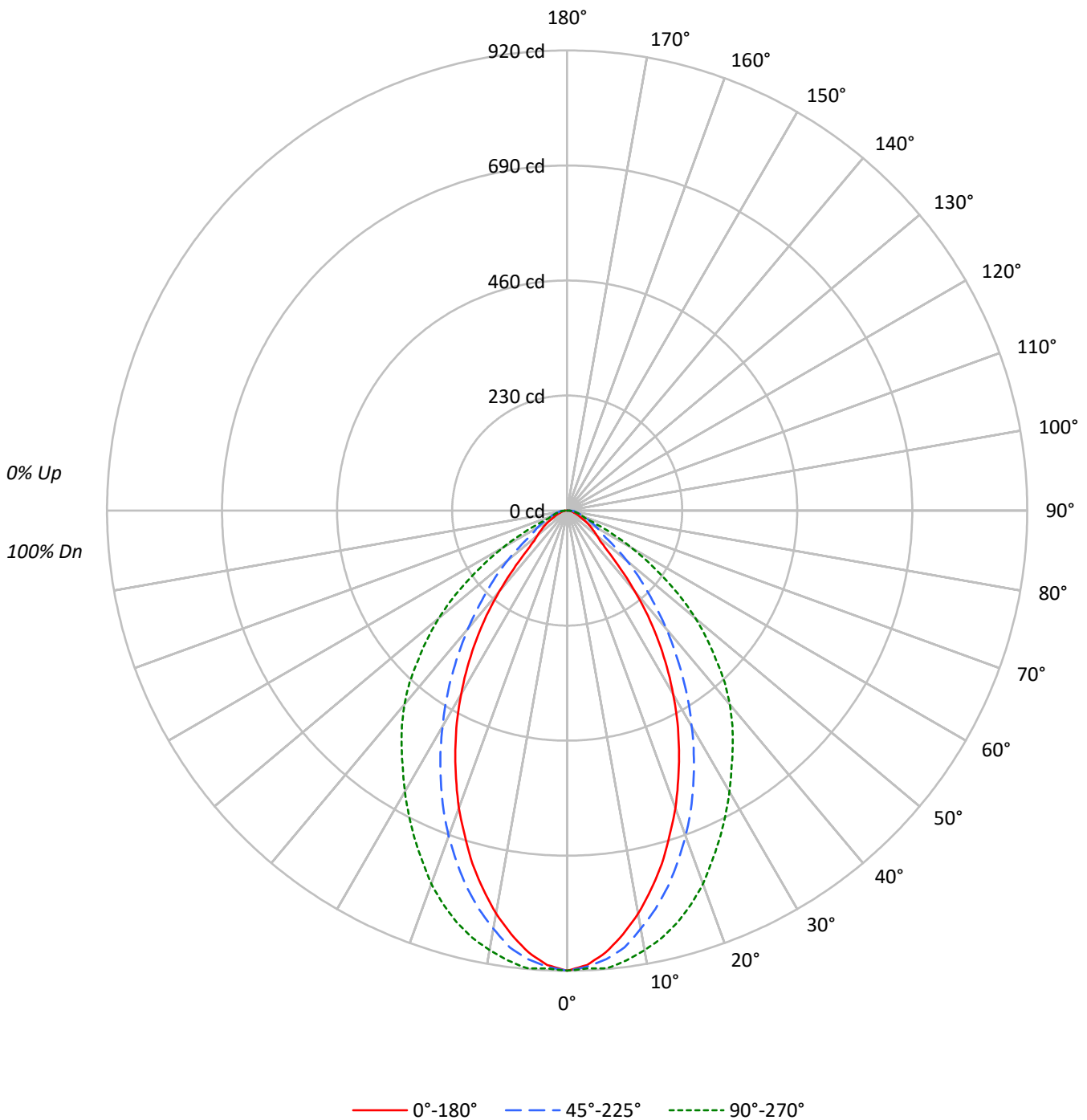
Lumens per Lamp: N/A
Luminaire Lumens: 1234.7 lumens
Efficiency: N/A
Efficacy: 29.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (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	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°	10801	10801	10801
5°	10451	10612	10828
10°	9755	10122	10639
15°	8889	9459	10361
20°	7910	8652	9923
25°	6854	7743	9356
30°	5748	6755	8800
35°	4553	5748	8271
40°	3222	4729	7758
45°	1898	3738	6983
50°	1419	2839	6116
55°	1194	1918	4911
60°	965	1637	3488
65°	761	1398	1842
70°	666	1215	1136
75°	622	1139	1089
80°	615	1237	1082
85°	768	1846	1388

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6983 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.6	6.9
10°-20°	220.0	17.8
20°-30°	280.2	22.7
30°-40°	263.5	21.3
40°-50°	189.8	15.4
50°-60°	109.6	8.9
60°-70°	50.1	4.1
70°-80°	25.0	2.0
80°-90°	11.8	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°	584.8	47.4
0°-40°	848.3	68.7
0°-60°	1147.7	93.0
0°-90°	1234.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1234.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	920	920	920	920	920	
5°	887	902	900	910	919	82
15°	731	758	778	822	852	204
25°	529	556	598	664	722	242
35°	318	345	401	494	577	197
45°	114	143	225	338	420	97
55°	58	61	94	178	240	52
65°	27	39	50	56	66	28
75°	14	26	25	24	24	15
85°	6	13	14	13	10	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	919.8	919.8	919.8	919.8	919.8
2.5°	909.5	920.9	912.9	914.0	916.3
5°	886.6	901.5	900.3	909.5	918.6
7.5°	854.6	871.8	880.9	894.6	907.2
10°	818.1	837.5	848.9	874.0	892.3
12.5°	775.8	800.9	815.8	848.9	875.2
15°	731.2	757.5	778.1	821.5	852.3
17.5°	681.0	709.5	735.8	787.2	824.9
20°	633.0	660.4	692.4	748.4	794.1
22.5°	580.4	610.1	646.7	706.1	757.5
25°	529.0	556.4	597.6	663.8	722.1
27.5°	477.6	505.0	548.4	621.5	685.5
30°	423.9	452.4	498.2	579.3	649.0
32.5°	371.3	398.7	450.2	538.1	611.3
35°	317.6	345.0	401.0	493.6	577.0
37.5°	265.1	293.6	353.0	457.0	542.7
40°	210.2	241.1	308.5	419.3	506.1
42.5°	158.8	191.9	263.9	380.5	466.2
45°	114.3	142.8	225.1	338.2	420.5
47.5°	89.1	104.0	189.7	294.8	378.2
50°	77.7	80.0	155.4	254.8	334.8
52.5°	67.4	69.7	122.3	217.1	289.1
55°	58.3	60.6	93.7	178.2	239.9
57.5°	49.1	52.6	77.7	141.7	193.1
60°	41.1	45.7	69.7	108.5	148.5
62.5°	33.1	41.1	59.4	80.0	106.3
65°	27.4	38.8	50.3	56.0	66.3
67.5°	22.9	35.4	42.3	40.0	38.8
70°	19.4	32.0	35.4	32.0	33.1
72.5°	16.0	29.7	29.7	27.4	27.4
75°	13.7	26.3	25.1	24.0	24.0
77.5°	11.4	22.9	21.7	20.6	19.4
80°	9.1	18.3	18.3	17.1	16.0
82.5°	8.0	14.9	14.9	14.9	12.6
85°	5.7	12.6	13.7	12.6	10.3
87.5°	4.6	11.4	11.4	10.3	6.9
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	8.24	9.56	8.61	9.87	10.19	15.60	16.92	15.97	17.23	17.55
	3H	9.63	10.80	10.01	11.13	11.49	15.83	17.00	16.21	17.33	17.70
	4H	10.18	11.27	10.58	11.62	12.01	15.95	17.04	16.35	17.39	17.77
	6H	10.61	11.62	11.03	11.99	12.38	16.06	17.06	16.48	17.43	17.83
	8H	10.79	11.74	11.22	12.13	12.54	16.11	17.06	16.54	17.45	17.86
	12H	10.95	11.85	11.38	12.24	12.67	16.17	17.08	16.60	17.46	17.89
4H	2H	9.34	10.43	9.74	10.78	11.17	15.56	16.65	15.96	17.00	17.38
	3H	11.00	11.90	11.42	12.30	12.70	15.92	16.81	16.33	17.22	17.62
	4H	11.81	12.61	12.25	13.03	13.48	16.12	16.92	16.55	17.34	17.78
	6H	12.45	13.14	12.91	13.59	14.05	16.34	17.03	16.81	17.48	17.95
	8H	12.68	13.33	13.15	13.78	14.25	16.45	17.09	16.92	17.54	18.01
	12H	12.90	13.47	13.38	13.95	14.43	16.58	17.15	17.06	17.63	18.11
8H	4H	12.25	12.90	12.72	13.35	13.82	16.15	16.80	16.62	17.25	17.72
	6H	13.17	13.70	13.67	14.19	14.67	16.48	17.01	16.98	17.51	17.99
	8H	13.59	14.06	14.11	14.58	15.07	16.67	17.15	17.19	17.66	18.16
	12H	14.01	14.43	14.52	14.92	15.49	16.92	17.35	17.44	17.84	18.41
12H	4H	12.31	12.88	12.80	13.37	13.84	16.14	16.72	16.63	17.20	17.67
	6H	13.30	13.78	13.82	14.29	14.78	16.50	16.98	17.02	17.49	17.98
	8H	13.84	14.26	14.36	14.76	15.33	16.76	17.18	17.27	17.67	18.24