

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: P1059095

Luminaire Tested: S123RDRP-S1165D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059095
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1165D835-X4F0-XX-UDD-BVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

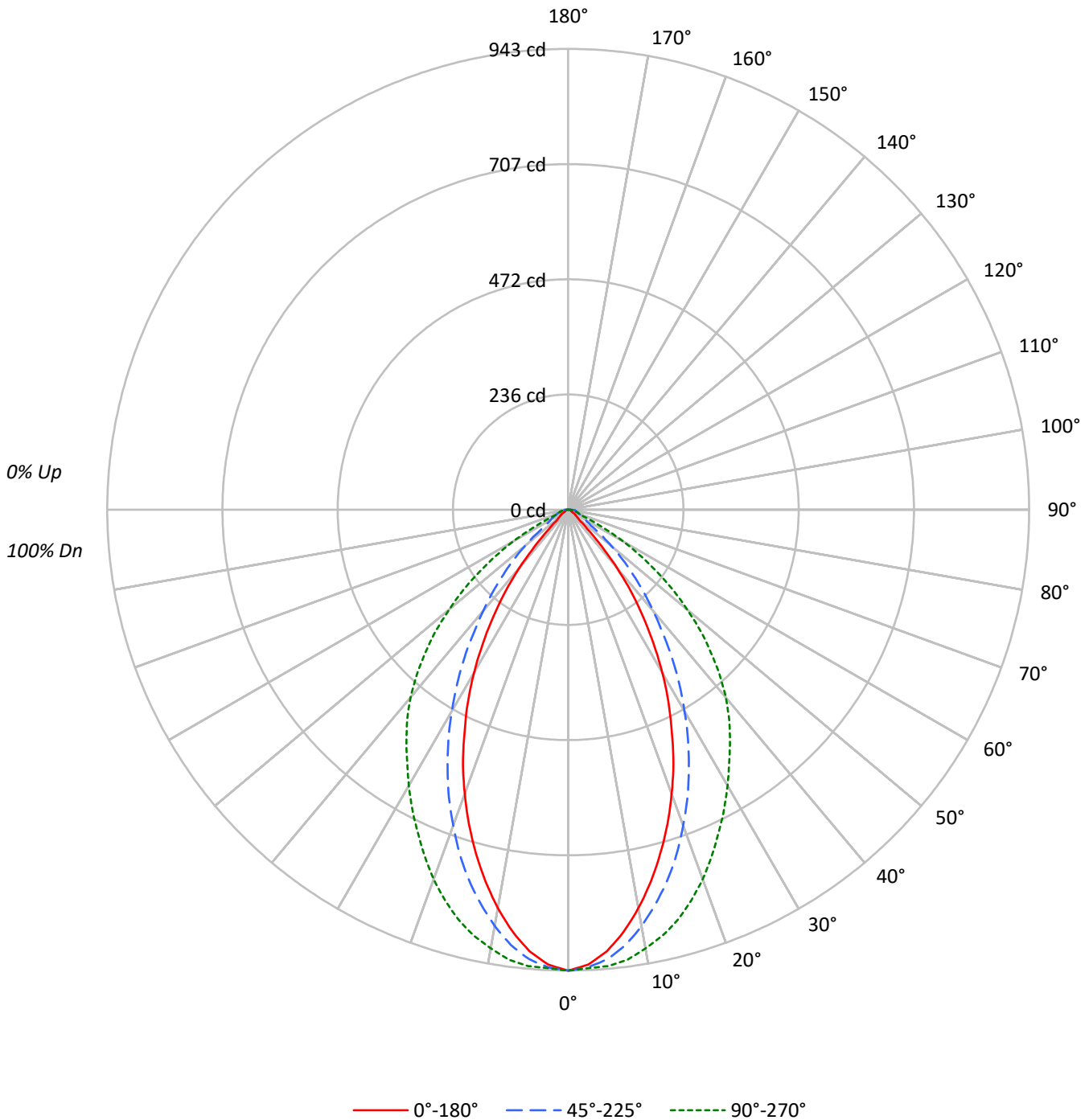
Lumens per Lamp: N/A
Luminaire Lumens: 1133.0 lumens
Efficiency: N/A
Efficacy: 27.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81					81			
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55					55			
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	61	56	52	50					50			
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46					46			
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43					43			
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11075	11075	11075
5°	10693	10880	11049
10°	9870	10317	10868
15°	8854	9538	10554
20°	7731	8596	10057
25°	6503	7568	9436
30°	5222	6453	8839
35°	3825	5314	8270
40°	2365	4134	7693
45°	910	3114	6850
50°	448	2134	5796
55°	354	1181	4547
60°	237	982	3048
65°	200	881	1361
70°	199	793	793
75°	263	848	785
80°	392	1075	879
85°	579	1751	1172

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6850 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.5	7.6
10°-20°	221.4	19.5
20°-30°	274.8	24.3
30°-40°	246.2	21.7
40°-50°	161.8	14.3
50°-60°	81.1	7.2
60°-70°	32.0	2.8
70°-80°	17.9	1.6
80°-90°	11.3	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°	582.7	51.4
0°-40°	828.9	73.2
0°-60°	1071.8	94.6
0°-90°	1133.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1133.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	943	943	943	943	943	
5°	907	922	923	929	937	84
15°	728	751	785	838	868	203
25°	502	534	584	666	728	229
35°	267	303	371	485	577	165
45°	55	91	188	316	412	52
55°	17	20	58	156	222	15
65°	7	20	32	40	49	7
75°	6	19	19	17	17	6
85°	4	13	13	13	9	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	943.2	943.2	943.2	943.2	943.2
2.5°	931.7	944.7	937.4	937.4	938.9
5°	907.2	921.6	923.0	928.8	937.4
7.5°	871.1	889.9	898.5	915.8	928.8
10°	827.8	848.0	865.3	895.6	911.5
12.5°	780.2	800.4	826.4	868.2	892.7
15°	728.3	751.4	784.6	837.9	868.2
17.5°	675.0	698.0	738.4	799.0	837.9
20°	618.7	644.7	687.9	757.2	804.8
22.5°	562.5	591.3	637.5	712.5	767.3
25°	501.9	533.6	584.1	666.3	728.3
27.5°	444.2	477.4	530.7	620.2	690.8
30°	385.1	418.2	475.9	572.6	651.9
32.5°	324.5	362.0	422.6	527.9	612.9
35°	266.8	302.9	370.7	484.6	576.9
37.5°	210.6	246.6	317.3	442.8	540.8
40°	154.3	191.8	269.7	402.4	501.9
42.5°	101.0	139.9	227.9	362.0	458.6
45°	54.8	90.9	187.5	315.8	412.5
47.5°	30.3	49.0	151.4	272.6	367.8
50°	24.5	27.4	116.8	232.2	317.3
52.5°	20.2	23.1	83.6	193.3	271.1
55°	17.3	20.2	57.7	155.8	222.1
57.5°	14.4	17.3	46.2	119.7	174.5
60°	10.1	17.3	41.8	88.0	129.8
62.5°	8.7	17.3	36.1	60.6	86.5
65°	7.2	20.2	31.7	40.4	49.0
67.5°	5.8	20.2	27.4	26.0	26.0
70°	5.8	20.2	23.1	21.6	23.1
72.5°	5.8	21.6	21.6	20.2	20.2
75°	5.8	18.7	18.7	17.3	17.3
77.5°	5.8	17.3	17.3	15.9	15.9
80°	5.8	15.9	15.9	14.4	13.0
82.5°	5.8	14.4	14.4	13.0	11.5
85°	4.3	13.0	13.0	13.0	8.7
87.5°	4.3	11.5	13.0	11.5	7.2
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	0.81	2.07	1.17	2.38	2.69	14.90	16.16	15.27	16.47	16.79
	3H	3.34	4.45	3.72	4.78	5.15	14.98	16.09	15.36	16.42	16.79
	4H	4.51	5.54	4.91	5.89	6.28	15.04	16.08	15.45	16.43	16.81
	6H	5.56	6.51	5.98	6.88	7.28	15.14	16.09	15.56	16.46	16.86
	8H	6.10	7.00	6.54	7.40	7.80	15.20	16.10	15.63	16.49	16.90
	12H	6.58	7.44	7.02	7.83	8.26	15.27	16.13	15.71	16.52	16.95
4H	2H	4.07	5.11	4.47	5.46	5.84	14.76	15.80	15.16	16.15	16.53
	3H	6.54	7.38	6.95	7.79	8.19	14.94	15.78	15.35	16.19	16.59
	4H	7.88	8.63	8.31	9.05	9.50	15.06	15.82	15.50	16.24	16.68
	6H	9.01	9.67	9.48	10.12	10.58	15.28	15.93	15.74	16.38	16.85
	8H	9.53	10.14	10.00	10.59	11.06	15.40	16.01	15.87	16.46	16.93
	12H	9.98	10.52	10.47	11.01	11.48	15.56	16.10	16.05	16.59	17.06
8H	4H	8.79	9.40	9.26	9.85	10.32	15.07	15.68	15.54	16.12	16.60
	6H	10.40	10.90	10.90	11.40	11.88	15.40	15.90	15.90	16.40	16.88
	8H	11.23	11.68	11.75	12.19	12.69	15.62	16.08	16.15	16.59	17.09
	12H	12.00	12.40	12.52	12.90	13.47	15.95	16.35	16.47	16.85	17.42
12H	4H	8.96	9.50	9.45	9.99	10.46	15.06	15.59	15.54	16.08	16.55
	6H	10.71	11.17	11.24	11.68	12.17	15.43	15.88	15.95	16.39	16.89
	8H	11.72	12.12	12.24	12.62	13.19	15.74	16.14	16.25	16.63	17.20