

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: P1059144

Luminaire Tested: S123RDRP-S1165D935-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059144
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-S1165D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

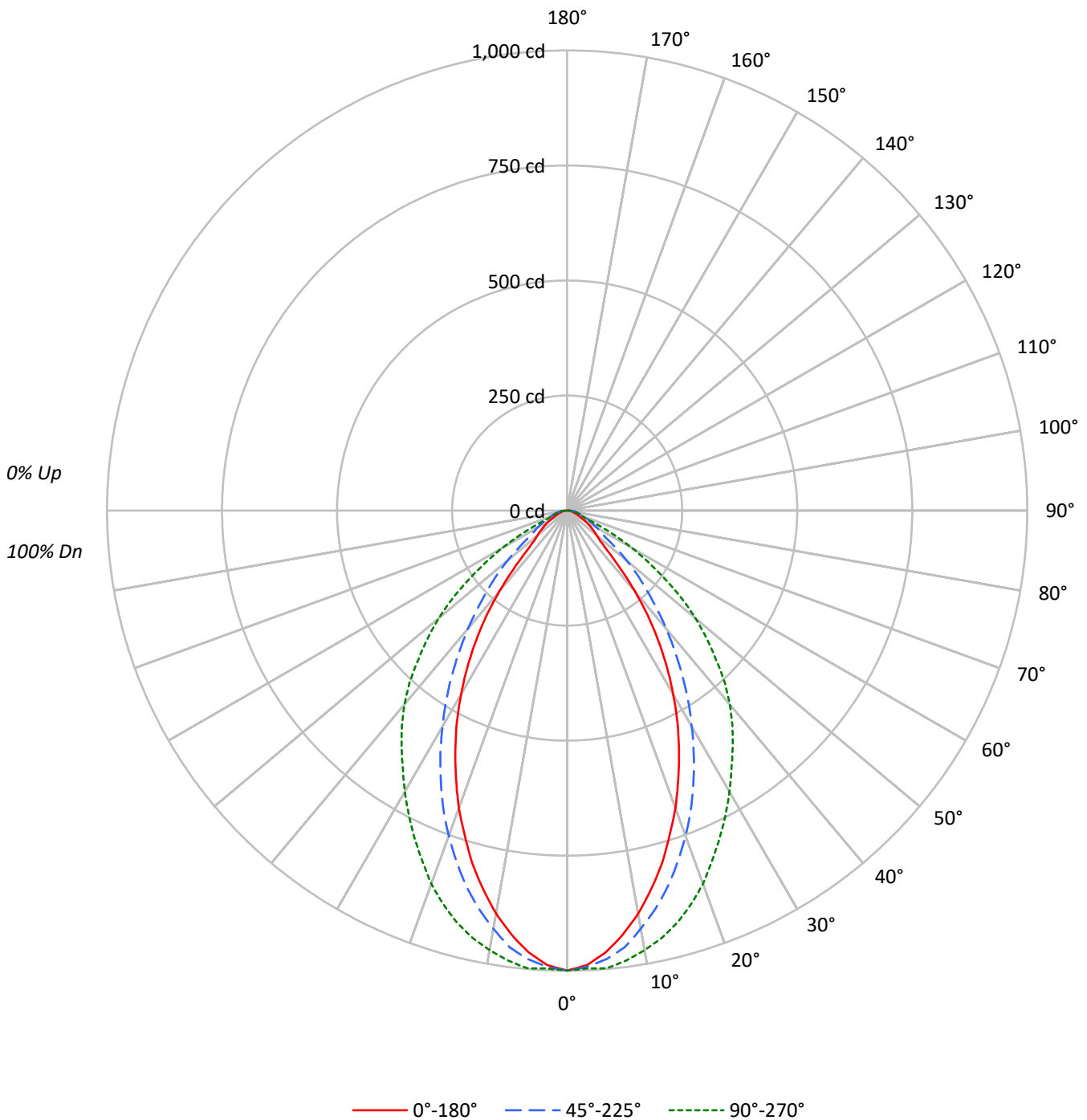
Lumens per Lamp: N/A
Luminaire Lumens: 1341.9 lumens
Efficiency: N/A
Efficacy: 32.1 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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	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°	11739	11739	11739
5°	11358	11534	11768
10°	10601	11002	11563
15°	9662	10281	11262
20°	8597	9403	10785
25°	7450	8415	10168
30°	6247	7341	9563
35°	4948	6249	8989
40°	3503	5140	8432
45°	2063	4062	7589
50°	1542	3085	6646
55°	1296	2084	5339
60°	1050	1778	3790
65°	828	1517	2001
70°	724	1322	1236
75°	676	1239	1184
80°	669	1346	1177
85°	835	2007	1509

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7589 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.0	6.9
10°-20°	239.1	17.8
20°-30°	304.5	22.7
30°-40°	286.4	21.3
40°-50°	206.3	15.4
50°-60°	119.1	8.9
60°-70°	54.5	4.1
70°-80°	27.2	2.0
80°-90°	12.9	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°	635.6	47.4
0°-40°	922.0	68.7
0°-60°	1247.4	93.0
0°-90°	1341.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1341.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1000	1000	1000	1000	1000	
5°	964	980	978	988	998	90
15°	795	823	846	893	926	221
25°	575	605	650	722	785	263
35°	345	375	436	536	627	214
45°	124	155	245	368	457	105
55°	63	66	102	194	261	57
65°	30	42	55	61	72	31
75°	15	29	27	26	26	16
85°	6	14	15	14	11	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	999.7	999.7	999.7	999.7	999.7
2.5°	988.5	1000.9	992.2	993.4	995.9
5°	963.6	979.8	978.5	988.5	998.4
7.5°	928.9	947.5	957.4	972.3	986.0
10°	889.1	910.2	922.7	950.0	969.8
12.5°	843.2	870.5	886.6	922.7	951.2
15°	794.8	823.3	845.7	892.9	926.4
17.5°	740.1	771.2	799.7	855.6	896.6
20°	688.0	717.8	752.5	813.4	863.1
22.5°	630.8	663.1	702.9	767.4	823.3
25°	575.0	604.8	649.5	721.5	784.8
27.5°	519.1	548.9	596.1	675.5	745.1
30°	460.7	491.8	541.4	629.6	705.3
32.5°	403.6	433.4	489.3	584.9	664.4
35°	345.2	375.0	435.9	536.5	627.1
37.5°	288.1	319.1	383.7	496.7	589.9
40°	228.5	262.0	335.3	455.7	550.1
42.5°	172.6	208.6	286.9	413.5	506.7
45°	124.2	155.2	244.6	367.6	457.0
47.5°	96.9	113.0	206.1	320.4	411.0
50°	84.4	86.9	168.9	276.9	363.8
52.5°	73.3	75.7	132.9	235.9	314.2
55°	63.3	65.8	101.8	193.7	260.8
57.5°	53.4	57.1	84.4	154.0	209.9
60°	44.7	49.7	75.7	118.0	161.4
62.5°	36.0	44.7	64.6	86.9	115.5
65°	29.8	42.2	54.6	60.8	72.0
67.5°	24.8	38.5	45.9	43.5	42.2
70°	21.1	34.8	38.5	34.8	36.0
72.5°	17.4	32.3	32.3	29.8	29.8
75°	14.9	28.6	27.3	26.1	26.1
77.5°	12.4	24.8	23.6	22.4	21.1
80°	9.9	19.9	19.9	18.6	17.4
82.5°	8.7	16.1	16.1	16.1	13.7
85°	6.2	13.7	14.9	13.7	11.2
87.5°	5.0	12.4	12.4	11.2	7.5
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	8.53	9.84	8.89	10.16	10.47	15.89	17.21	16.26	17.52	17.84
	3H	9.91	11.08	10.29	11.41	11.78	16.12	17.29	16.50	17.62	17.99
	4H	10.47	11.56	10.87	11.91	12.29	16.24	17.33	16.64	17.68	18.06
	6H	10.90	11.90	11.32	12.27	12.67	16.35	17.35	16.77	17.72	18.12
	8H	11.08	12.03	11.51	12.42	12.82	16.40	17.35	16.83	17.74	18.15
	12H	11.23	12.14	11.67	12.52	12.95	16.46	17.37	16.90	17.75	18.18
4H	2H	9.62	10.72	10.03	11.07	11.45	15.85	16.94	16.25	17.29	17.67
	3H	11.29	12.18	11.70	12.59	12.99	16.21	17.10	16.62	17.51	17.91
	4H	12.10	12.90	12.54	13.32	13.76	16.41	17.21	16.84	17.63	18.07
	6H	12.73	13.43	13.20	13.87	14.34	16.63	17.33	17.10	17.77	18.24
	8H	12.97	13.62	13.44	14.06	14.53	16.74	17.38	17.21	17.83	18.30
	12H	13.18	13.75	13.67	14.24	14.71	16.87	17.44	17.35	17.92	18.40
8H	4H	12.54	13.19	13.01	13.64	14.11	16.44	17.09	16.91	17.54	18.01
	6H	13.45	13.98	13.95	14.48	14.96	16.77	17.30	17.27	17.80	18.28
	8H	13.87	14.35	14.39	14.86	15.35	16.96	17.44	17.48	17.95	18.45
	12H	14.29	14.71	14.80	15.21	15.78	17.21	17.63	17.73	18.13	18.70
12H	4H	12.60	13.17	13.09	13.65	14.13	16.43	17.01	16.92	17.49	17.96
	6H	13.59	14.06	14.11	14.58	15.07	16.79	17.27	17.31	17.78	18.27
	8H	14.12	14.55	14.64	15.04	15.61	17.04	17.47	17.56	17.96	18.53