

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: P1060578

Luminaire Tested: S124RDRP-S795D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060578
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S795D850-X4F0-XX-UDD-WVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

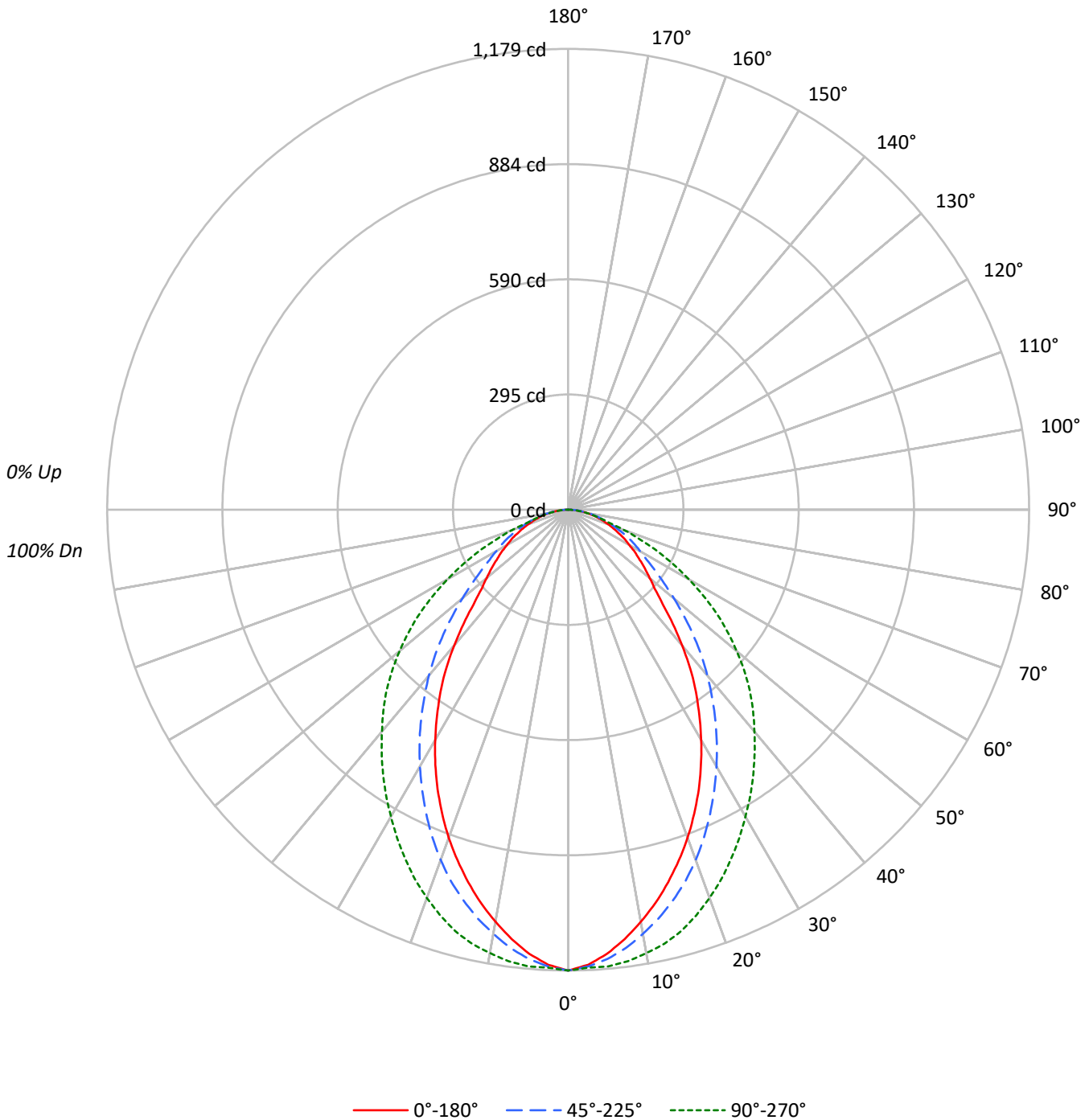
Lumens per Lamp: N/A
Luminaire Lumens: 2163.3 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10153	10153	10153
5°	9858	9974	10137
10°	9360	9634	10072
15°	8799	9227	9953
20°	8184	8739	9685
25°	7504	8159	9368
30°	6764	7542	9016
35°	5989	6899	8676
40°	5090	6228	8327
45°	4167	5502	8005
50°	3648	4725	7534
55°	3352	4073	6971
60°	3109	3665	6145
65°	2912	3443	5145
70°	2732	3152	3862
75°	2569	2881	2811
80°	2380	2638	2380
85°	2164	2579	2065

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8005 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.0	5.0
10°-20°	293.2	13.6
20°-30°	400.7	18.5
30°-40°	421.1	19.5
40°-50°	365.5	16.9
50°-60°	275.7	12.7
60°-70°	178.7	8.3
70°-80°	91.7	4.2
80°-90°	27.8	1.3
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°	802.8	37.1
0°-40°	1224.0	56.6
0°-60°	1865.1	86.2
0°-90°	2163.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2163.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1179	1179	1179	1179	1179	
5°	1140	1156	1154	1163	1173	107
15°	987	1011	1035	1082	1116	277
25°	790	818	859	924	986	362
35°	570	601	656	744	825	354
45°	342	375	452	564	657	269
55°	223	230	271	385	464	201
65°	143	146	169	204	252	142
75°	77	87	87	88	84	82
85°	22	27	26	25	21	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1179.0	1179.0	1179.0	1179.0	1179.0
2.5°	1165.4	1180.0	1169.6	1171.7	1172.7
5°	1140.4	1156.0	1153.9	1163.3	1172.7
7.5°	1108.0	1126.8	1131.0	1149.8	1165.4
10°	1070.5	1091.3	1101.8	1132.0	1151.9
12.5°	1030.8	1051.7	1070.5	1109.1	1137.2
15°	987.0	1011.0	1035.0	1081.9	1116.4
17.5°	941.1	966.1	996.4	1047.5	1088.2
20°	893.1	918.1	953.6	1008.9	1056.9
22.5°	842.0	870.1	907.7	967.2	1023.5
25°	789.8	818.0	858.7	924.4	986.0
27.5°	735.6	764.8	808.6	881.6	947.4
30°	680.3	711.6	758.5	835.7	906.7
32.5°	623.9	657.3	707.4	789.8	867.0
35°	569.7	601.0	656.3	743.9	825.3
37.5°	513.3	544.6	604.1	699.0	783.6
40°	452.8	487.2	554.0	652.1	740.8
42.5°	396.5	430.9	502.9	607.2	700.1
45°	342.2	374.6	451.8	564.4	657.3
47.5°	300.5	323.4	400.6	522.7	611.4
50°	272.3	282.7	352.7	476.8	562.4
52.5°	247.3	255.6	308.8	430.9	514.4
55°	223.3	229.5	271.3	385.0	464.3
57.5°	202.4	205.5	237.9	339.1	410.0
60°	180.5	184.7	212.8	292.1	356.8
62.5°	162.8	164.8	190.9	247.3	303.6
65°	142.9	146.1	169.0	204.5	252.5
67.5°	125.2	130.4	146.1	166.9	199.3
70°	108.5	115.8	125.2	135.6	153.4
72.5°	92.9	101.2	106.4	110.6	107.5
75°	77.2	86.6	86.6	87.6	84.5
77.5°	62.6	70.9	69.9	68.9	64.7
80°	48.0	55.3	53.2	52.2	48.0
82.5°	35.5	40.7	38.6	37.6	32.3
85°	21.9	27.1	26.1	25.0	20.9
87.5°	10.4	15.7	14.6	13.6	9.4
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	14.55	16.04	14.92	16.35	16.67	18.29	19.78	18.66	20.09	20.41
	3H	16.22	17.55	16.60	17.88	18.24	19.42	20.75	19.80	21.08	21.44
	4H	16.89	18.14	17.29	18.49	18.87	19.72	20.96	20.12	21.31	21.69
	6H	17.40	18.55	17.81	18.92	19.31	19.92	21.07	20.33	21.44	21.83
	8H	17.57	18.67	18.00	19.06	19.46	19.97	21.07	20.40	21.46	21.86
	12H	17.69	18.74	18.12	19.12	19.55	20.00	21.05	20.43	21.44	21.86
4H	2H	15.35	16.60	15.75	16.94	17.32	18.46	19.71	18.86	20.06	20.44
	3H	17.22	18.25	17.63	18.65	19.06	19.79	20.83	20.20	21.23	21.63
	4H	18.02	18.95	18.46	19.37	19.81	20.21	21.14	20.64	21.55	21.99
	6H	18.67	19.48	19.12	19.92	20.38	20.53	21.34	20.99	21.78	22.24
	8H	18.89	19.65	19.35	20.09	20.56	20.62	21.38	21.09	21.82	22.29
	12H	19.05	19.73	19.54	20.21	20.68	20.69	21.37	21.18	21.85	22.32
8H	4H	18.37	19.13	18.84	19.57	20.04	20.34	21.10	20.80	21.54	22.01
	6H	19.16	19.79	19.66	20.28	20.76	20.76	21.38	21.26	21.88	22.35
	8H	19.48	20.04	19.99	20.55	21.04	20.92	21.48	21.43	21.99	22.48
	12H	19.74	20.24	20.25	20.73	21.30	21.05	21.55	21.57	22.04	22.61
12H	4H	18.40	19.08	18.88	19.56	20.03	20.34	21.02	20.83	21.50	21.97
	6H	19.22	19.78	19.74	20.29	20.78	20.78	21.34	21.29	21.85	22.34
	8H	19.61	20.10	20.12	20.60	21.16	20.99	21.49	21.50	21.98	22.54