

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: P1060567

Luminaire Tested: S124RDRP-S795D840-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060567
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S795D840-X4F0-XX-UDD-WVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

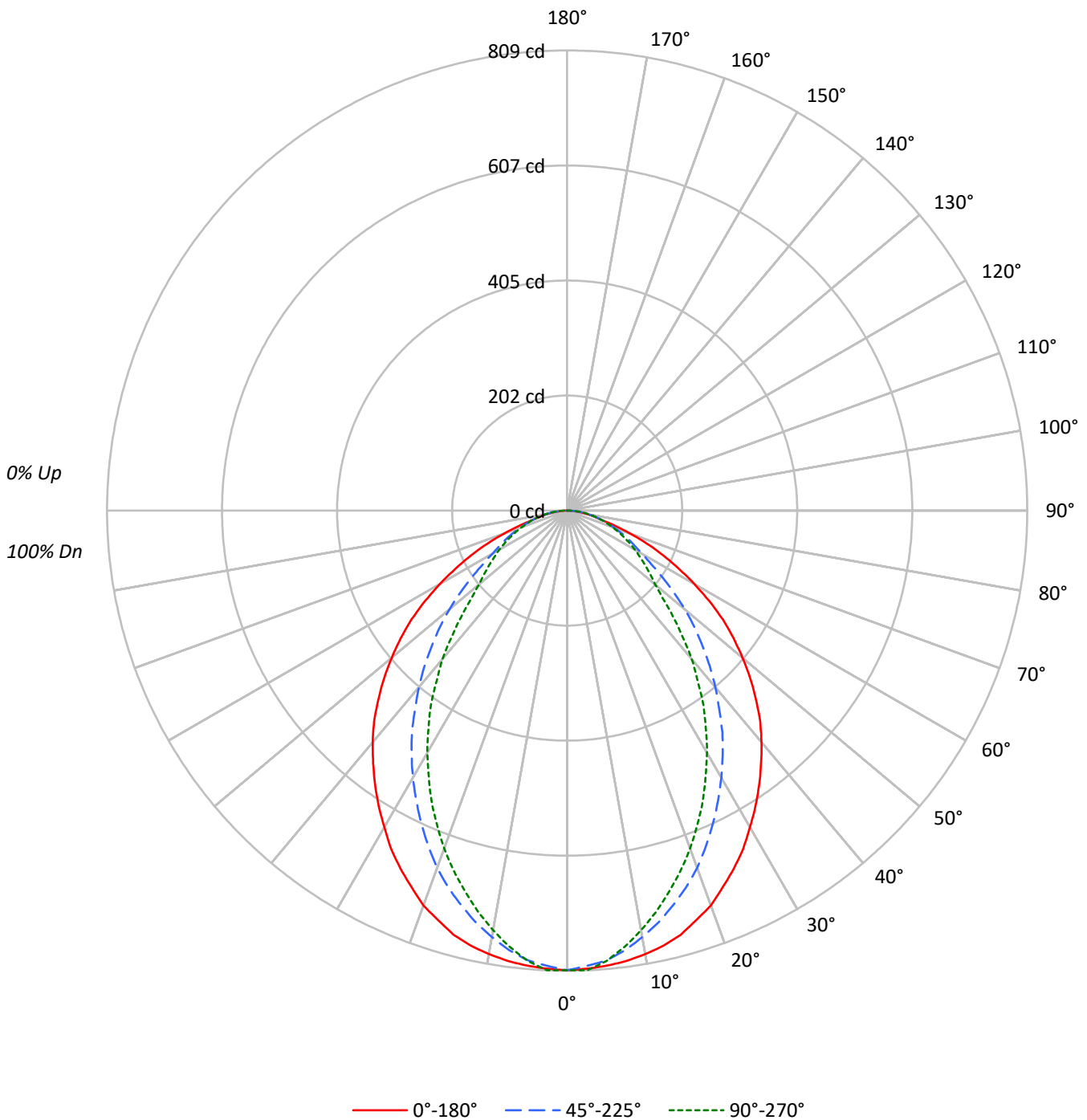
Lumens per Lamp: N/A
Luminaire Lumens: 1557.9 lumens
Efficiency: N/A
Efficacy: 60.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6958	6958	6958
5°	6943	6861	6869
10°	6923	6658	6550
15°	6881	6407	6179
20°	6769	6125	5794
25°	6594	5764	5359
30°	6392	5390	4890
35°	6188	5001	4391
40°	5977	4557	3831
45°	5711	4093	3203
50°	5393	3612	2709
55°	5017	3064	2509
60°	4447	2601	2372
65°	3792	2398	2243
70°	2963	2223	2127
75°	2023	2053	2053
80°	1741	1929	1979
85°	1502	1877	2065

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5711 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.2	4.8
10°-20°	204.1	13.1
20°-30°	283.4	18.2
30°-40°	303.8	19.5
40°-50°	269.1	17.3
50°-60°	202.8	13.0
60°-70°	131.3	8.4
70°-80°	67.4	4.3
80°-90°	20.7	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°	562.7	36.1
0°-40°	866.5	55.6
0°-60°	1338.5	85.9
0°-90°	1557.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1557.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	808	808	808	808	808	
5°	803	804	794	795	795	76
15°	772	755	719	701	693	217
25°	694	657	607	574	564	319
35°	589	536	476	433	418	368
45°	469	408	336	284	263	362
55°	334	278	204	172	167	297
65°	186	150	118	111	110	185
75°	61	64	62	62	62	72
85°	15	16	19	21	21	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	808.0	808.0	808.0	808.0	808.0
2.5°	806.1	808.9	801.3	807.0	808.9
5°	803.2	804.2	793.7	794.7	794.7
7.5°	798.5	796.6	779.5	774.7	773.8
10°	791.8	786.1	761.4	751.9	749.1
12.5°	783.3	772.8	741.5	728.2	722.5
15°	771.9	754.8	718.7	700.7	693.1
17.5°	754.8	733.0	695.0	672.2	663.7
20°	738.7	709.2	668.4	639.9	632.3
22.5°	715.9	684.5	638.0	607.6	598.1
25°	694.0	657.0	606.7	574.4	564.0
27.5°	670.3	628.5	574.4	540.2	526.9
30°	642.8	598.1	542.1	506.0	491.8
32.5°	616.2	568.7	508.9	469.0	453.8
35°	588.6	535.5	475.7	432.9	417.7
37.5°	560.2	504.1	438.6	396.9	376.9
40°	531.7	472.8	405.4	357.9	340.8
42.5°	502.2	440.5	371.2	321.9	300.0
45°	469.0	408.3	336.1	283.9	263.0
47.5°	436.7	376.9	303.8	246.9	227.9
50°	402.6	343.7	269.6	214.6	202.2
52.5°	368.4	309.5	236.4	189.9	184.2
55°	334.2	278.2	204.1	171.8	167.1
57.5°	296.2	245.9	175.6	155.7	151.9
60°	258.2	210.8	151.0	140.5	137.7
62.5°	221.2	180.4	133.9	125.3	123.4
65°	186.1	150.0	117.7	111.1	110.1
67.5°	151.9	123.4	102.5	98.7	96.8
70°	117.7	98.7	88.3	86.4	84.5
72.5°	87.3	79.8	75.0	74.1	73.1
75°	60.8	63.6	61.7	61.7	61.7
77.5°	48.4	49.4	50.3	51.3	50.3
80°	35.1	38.0	38.9	40.8	39.9
82.5°	24.7	26.6	29.4	30.4	31.3
85°	15.2	16.1	19.0	20.9	20.9
87.5°	6.6	7.6	9.5	11.4	12.3
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	17.18	18.68	17.54	18.99	19.31	13.74	15.24	14.11	15.55	15.87
	3H	18.38	19.73	18.76	20.05	20.42	15.44	16.78	15.82	17.11	17.47
	4H	18.69	19.95	19.09	20.30	20.68	16.12	17.38	16.52	17.72	18.10
	6H	18.89	20.06	19.31	20.42	20.82	16.66	17.83	17.08	18.19	18.59
	8H	18.95	20.06	19.38	20.45	20.85	16.88	17.99	17.31	18.38	18.78
	12H	18.98	20.04	19.41	20.43	20.86	17.06	18.11	17.49	18.50	18.93
4H	2H	17.32	18.58	17.72	18.93	19.31	14.40	15.66	14.80	16.01	16.39
	3H	18.72	19.77	19.13	20.17	20.57	16.31	17.36	16.72	17.76	18.16
	4H	19.15	20.09	19.58	20.50	20.94	17.11	18.05	17.55	18.47	18.91
	6H	19.47	20.29	19.93	20.73	21.19	17.80	18.62	18.26	19.06	19.52
	8H	19.57	20.34	20.04	20.78	21.25	18.08	18.84	18.54	19.28	19.75
	12H	19.64	20.32	20.12	20.80	21.27	18.31	18.99	18.79	19.47	19.94
8H	4H	19.28	20.04	19.74	20.48	20.95	17.43	18.20	17.90	18.64	19.11
	6H	19.70	20.33	20.19	20.82	21.30	18.26	18.89	18.76	19.38	19.86
	8H	19.85	20.42	20.37	20.93	21.42	18.63	19.19	19.14	19.70	20.19
	12H	19.98	20.48	20.49	20.98	21.54	18.96	19.46	19.47	19.95	20.52
12H	4H	19.28	19.96	19.76	20.44	20.91	17.46	18.14	17.94	18.62	19.09
	6H	19.72	20.29	20.24	20.80	21.29	18.32	18.89	18.83	19.40	19.89
	8H	19.93	20.43	20.44	20.92	21.49	18.75	19.25	19.26	19.75	20.31