

Scaled data based on original data using
LM-79-2019 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: S124RDR-S795D840-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S124RDR-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

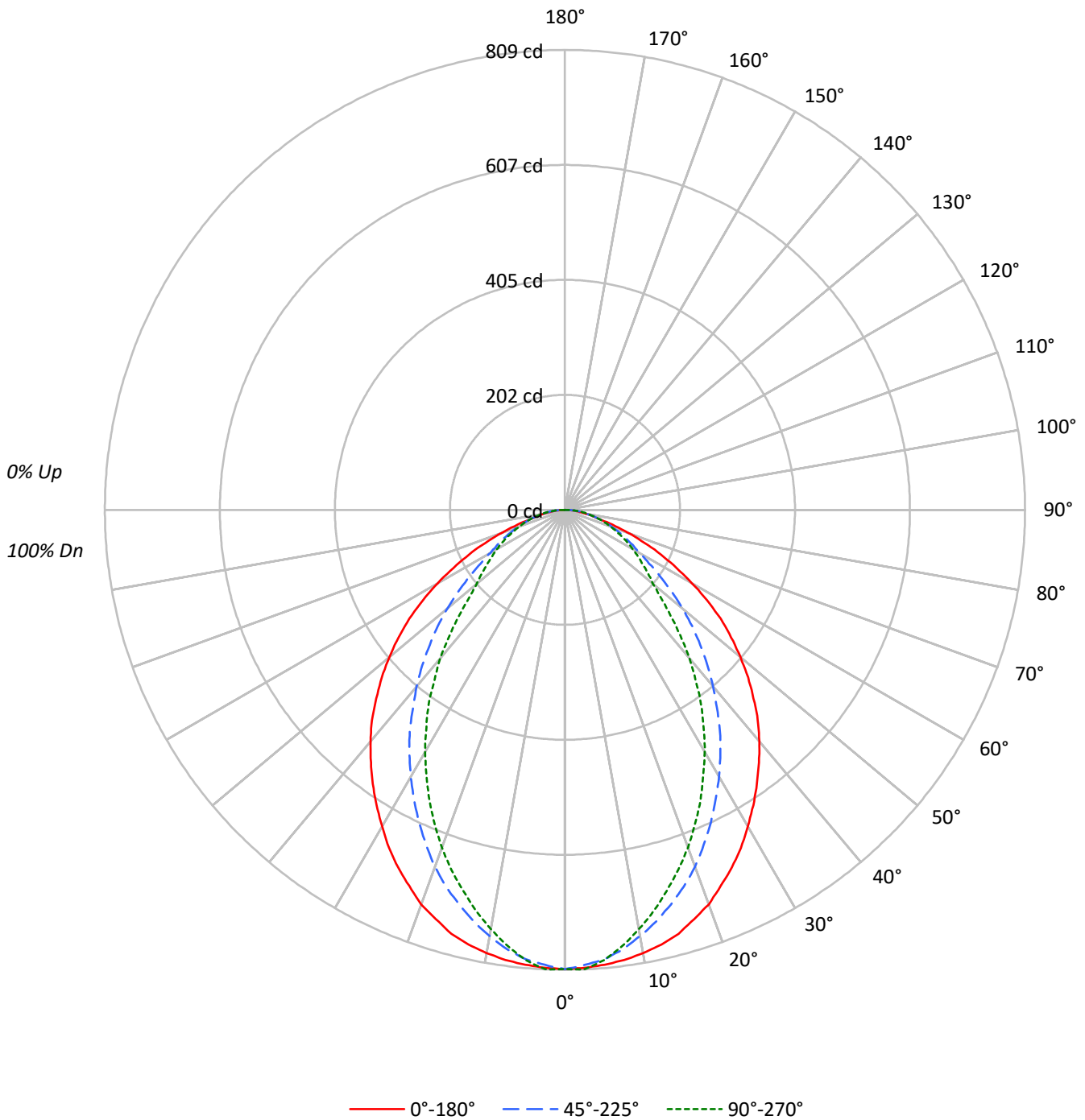
Lumens per Lamp: N/A
Luminaire Lumens: 1557.9 lumens
Efficiency: N/A
Efficacy: 60.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (Ain): 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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				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

(END OF REPORT)