

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: P1060549

Luminaire Tested: S124RDR-S795D830-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060549
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-S795D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

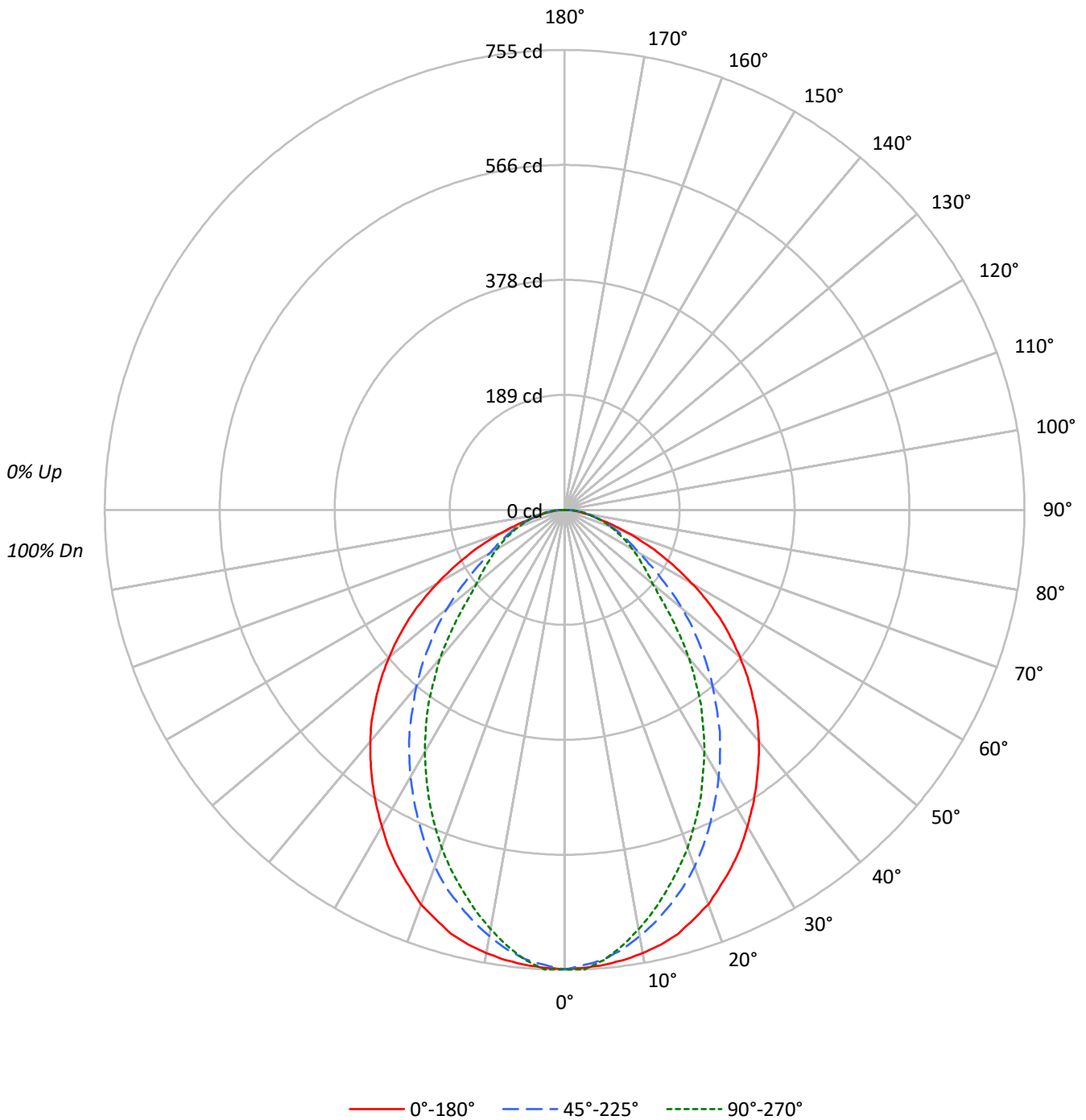
Lumens per Lamp: N/A
Luminaire Lumens: 1454.1 lumens
Efficiency: N/A
Efficacy: 56.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	6494	6494	6494
5°	6480	6403	6411
10°	6462	6214	6114
15°	6422	5980	5767
20°	6318	5716	5408
25°	6155	5380	5002
30°	5965	5031	4564
35°	5775	4667	4099
40°	5578	4254	3576
45°	5332	3820	2990
50°	5033	3372	2528
55°	4683	2860	2342
60°	4151	2427	2213
65°	3539	2239	2095
70°	2767	2075	1986
75°	1886	1916	1916
80°	1627	1800	1845
85°	1403	1749	1927

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5332 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.2	4.8
10°-20°	190.5	13.1
20°-30°	264.5	18.2
30°-40°	283.6	19.5
40°-50°	251.2	17.3
50°-60°	189.3	13.0
60°-70°	122.6	8.4
70°-80°	62.9	4.3
80°-90°	19.3	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°	525.2	36.1
0°-40°	808.8	55.6
0°-60°	1249.3	85.9
0°-90°	1454.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1454.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	754	754	754	754	754	
5°	750	751	741	742	742	71
15°	720	704	671	654	647	203
25°	648	613	566	536	526	298
35°	549	500	444	404	390	344
45°	438	381	314	265	246	338
55°	312	260	190	160	156	277
65°	174	140	110	104	103	172
75°	57	59	58	58	58	67
85°	14	15	18	20	20	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	754.1	754.1	754.1	754.1	754.1
2.5°	752.3	755.0	747.9	753.2	755.0
5°	749.7	750.6	740.8	741.7	741.7
7.5°	745.2	743.5	727.5	723.1	722.2
10°	739.0	733.7	710.7	701.8	699.2
12.5°	731.1	721.3	692.1	679.7	674.3
15°	720.4	704.5	670.8	654.0	646.9
17.5°	704.5	684.1	648.7	627.4	619.4
20°	689.4	661.9	623.8	597.3	590.2
22.5°	668.1	638.9	595.5	567.1	558.3
25°	647.8	613.2	566.2	536.1	526.4
27.5°	625.6	586.6	536.1	504.2	491.8
30°	599.9	558.3	506.0	472.3	459.0
32.5°	575.1	530.8	475.0	437.8	423.6
35°	549.4	499.8	444.0	404.1	389.9
37.5°	522.8	470.5	409.4	370.4	351.8
40°	496.2	441.3	378.4	334.1	318.1
42.5°	468.8	411.2	346.5	300.4	280.0
45°	437.8	381.0	313.7	265.0	245.5
47.5°	407.6	351.8	283.6	230.4	212.7
50°	375.7	320.8	251.7	200.3	188.7
52.5°	343.8	288.9	220.6	177.2	171.9
55°	311.9	259.6	190.5	160.4	156.0
57.5°	276.5	229.5	163.9	145.3	141.8
60°	241.0	196.7	140.9	131.1	128.5
62.5°	206.5	168.4	124.9	117.0	115.2
65°	173.7	140.0	109.9	103.7	102.8
67.5°	141.8	115.2	95.7	92.2	90.4
70°	109.9	92.2	82.4	80.6	78.9
72.5°	81.5	74.4	70.0	69.1	68.2
75°	56.7	59.4	57.6	57.6	57.6
77.5°	45.2	46.1	47.0	47.9	47.0
80°	32.8	35.4	36.3	38.1	37.2
82.5°	23.0	24.8	27.5	28.4	29.2
85°	14.2	15.1	17.7	19.5	19.5
87.5°	6.2	7.1	8.9	10.6	11.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)