

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: P1056081

Luminaire Tested: S124R3DR-S795D935-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056081
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124R3DR-S795D935-X4F0-XX-UDD-FLL-W
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

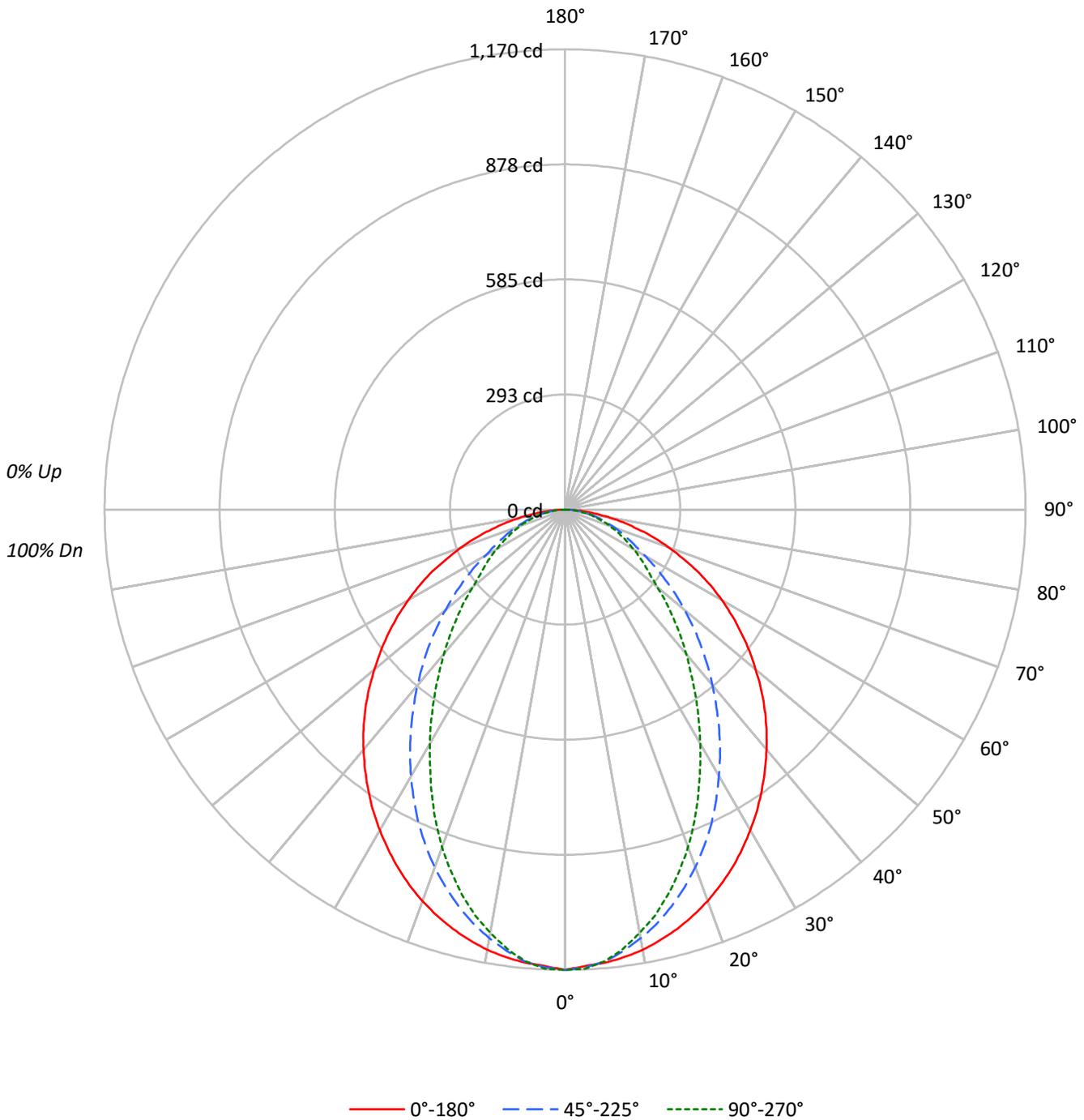
Lumens per Lamp: N/A
Luminaire Lumens: 2330.5 lumens
Efficiency: N/A
Efficacy: 88.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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

TEST NUMBER: P1056081

CATALOG NUMBER: S124R3DR-S795D935-X4F0-XX-UDD-FLL-W

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	105	102	98	107	103	100	97	99	96	93	95	93	91	92	90	88	86			86	
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73			73	
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63			63	
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55			55	
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49			49	
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43			43	
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39			39	
8	64	51	43	38	62	51	43	38	49	42	37	48	42	37	47	41	37	35			35	
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32			32	
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29			29	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10345	10345	10345
5°	10262	10239	10232
10°	10203	9933	9809
15°	10095	9560	9268
20°	9964	9106	8595
25°	9802	8584	7811
30°	9608	7990	7015
35°	9404	7370	6245
40°	9192	6728	5525
45°	8968	6104	4855
50°	8693	5448	4192
55°	8427	4791	3809
60°	8131	4111	3533
65°	7764	3728	3297
70°	7212	3451	3115
75°	6528	3177	2941
80°	5697	2938	2760
85°	4362	2709	2536

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8968 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.9	4.7
10°-20°	295.5	12.7
20°-30°	409.2	17.6
30°-40°	439.2	18.8
40°-50°	399.4	17.1
50°-60°	314.5	13.5
60°-70°	215.2	9.2
70°-80°	115.9	5.0
80°-90°	32.8	1.4
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°	813.6	34.9
0°-40°	1252.7	53.8
0°-60°	1966.6	84.4
0°-90°	2330.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2330.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1156	1169	1154	1148	1153	110
15°	1103	1091	1044	1016	1012	311
25°	1005	964	880	816	801	463
35°	871	803	683	600	579	545
45°	717	626	488	404	388	553
55°	547	443	311	251	247	489
65°	371	265	178	158	158	366
75°	191	116	93	85	86	204
85°	43	29	27	25	25	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1170.1	1170.1	1170.1	1170.1	1170.1
2.5°	1161.5	1175.3	1164.9	1166.7	1168.4
5°	1156.3	1169.2	1153.7	1147.7	1152.9
7.5°	1147.7	1156.3	1132.2	1121.0	1126.2
10°	1136.5	1138.2	1106.4	1090.0	1092.6
12.5°	1121.0	1116.7	1078.0	1054.7	1056.4
15°	1102.9	1090.9	1044.4	1016.0	1012.5
17.5°	1082.3	1062.5	1007.4	971.2	964.3
20°	1059.0	1032.3	967.8	921.3	913.5
22.5°	1033.2	998.8	924.7	869.6	858.4
25°	1004.8	963.5	879.9	816.2	800.7
27.5°	973.8	925.6	831.7	762.0	742.2
30°	941.1	886.0	782.6	707.7	687.1
32.5°	907.5	845.5	732.7	653.5	632.0
35°	871.3	803.3	682.8	600.1	578.6
37.5°	834.3	759.4	632.0	548.5	526.1
40°	796.4	715.5	582.9	496.8	478.7
42.5°	757.7	670.7	534.7	448.6	432.2
45°	717.2	625.9	488.2	403.8	388.3
47.5°	675.9	580.3	440.8	361.6	347.0
50°	632.0	534.7	396.1	320.3	304.8
52.5°	589.8	488.2	353.0	279.8	272.1
55°	546.7	442.6	310.8	250.6	247.1
57.5°	503.7	396.9	272.1	227.3	223.9
60°	459.8	352.1	232.5	203.2	199.8
62.5°	415.9	308.2	203.2	179.9	178.2
65°	371.1	265.2	178.2	158.4	157.6
67.5°	323.7	223.9	155.8	139.5	138.6
70°	279.0	182.5	133.5	120.5	120.5
72.5°	236.8	144.6	112.8	102.5	102.5
75°	191.1	116.2	93.0	85.2	86.1
77.5°	150.7	91.3	74.9	69.7	69.7
80°	111.9	68.0	57.7	53.4	54.2
82.5°	75.8	47.4	41.3	38.7	38.7
85°	43.0	29.3	26.7	25.0	25.0
87.5°	15.5	13.8	12.9	11.2	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)