

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: P1001088

Luminaire Tested: S124RDR-B575DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001088
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-B575DB2750-4F0-XX-W2A-F_3500K
Description: Define 4 Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

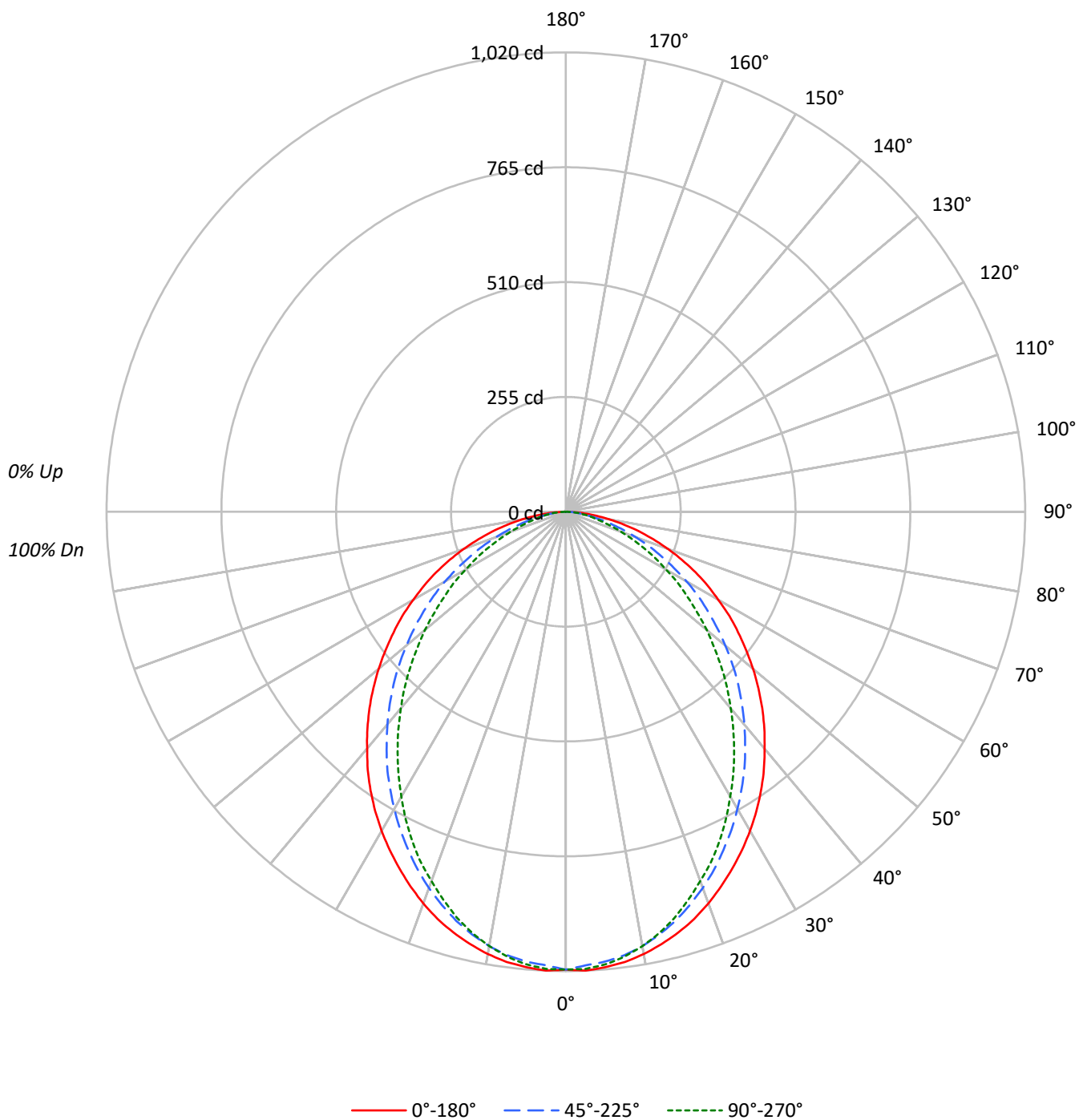
Lumens per Lamp: N/A
Luminaire Lumens: 2349.0 lumens
Efficiency: N/A
Efficacy: 97.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
Input Voltage (V):
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				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			
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	74	72			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62			
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	54			
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	47			
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	41			
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37			
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	33			
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30			
10	55	42	35	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8290	8290	8290
5°	8309	8207	8258
10°	8257	8109	8109
15°	8162	7938	7879
20°	8031	7715	7572
25°	7866	7452	7263
30°	7703	7176	6876
35°	7524	6889	6486
40°	7309	6563	6065
45°	7110	6239	5637
50°	6883	5866	5185
55°	6641	5478	4693
60°	6374	5053	4190
65°	6128	4521	3695
70°	5772	3934	3138
75°	5321	3261	2552
80°	4644	2484	2339
85°	3930	2255	2115

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7110 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.6	4.1
10°-20°	266.5	11.3
20°-30°	384.8	16.4
30°-40°	436.1	18.6
40°-50°	421.1	17.9
50°-60°	350.1	14.9
60°-70°	241.6	10.3
70°-80°	122.1	5.2
80°-90°	31.0	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°	747.0	31.8
0°-40°	1183.1	50.4
0°-60°	1954.3	83.2
0°-90°	2349.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2349.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1017	1017	1017	1017	1017	
5°	1015	1012	1003	1010	1009	96
15°	967	960	940	939	933	272
25°	874	860	828	815	807	403
35°	756	731	692	666	652	472
45°	616	588	541	503	489	475
55°	467	436	385	345	330	418
65°	318	284	234	201	192	314
75°	169	140	104	86	81	178
85°	42	26	24	23	23	49
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1016.6	1016.6	1016.6	1016.6	1016.6
2.5°	1019.7	1016.6	1008.1	1016.6	1015.8
5°	1015.1	1011.9	1002.6	1010.4	1008.8
7.5°	1008.1	1004.9	993.3	998.7	996.4
10°	997.2	993.3	979.3	982.4	979.3
12.5°	983.1	978.5	961.3	962.9	958.2
15°	966.8	959.8	940.3	938.8	933.3
17.5°	948.1	938.0	915.4	911.5	903.7
20°	925.5	915.4	889.0	882.7	872.6
22.5°	900.6	889.0	860.2	850.0	842.3
25°	874.2	860.2	828.2	815.0	807.2
27.5°	846.9	829.8	796.3	780.8	769.9
30°	818.1	798.7	762.1	742.6	730.2
32.5°	787.8	765.2	727.0	703.7	692.0
35°	755.8	730.9	692.0	665.5	651.5
37.5°	722.4	696.7	653.9	625.1	611.1
40°	686.6	660.9	616.5	583.8	569.8
42.5°	652.3	625.1	578.4	544.9	530.1
45°	616.5	587.7	541.0	502.9	488.8
47.5°	579.9	550.3	502.1	462.4	446.8
50°	542.6	512.2	462.4	423.5	408.7
52.5°	504.4	474.8	423.5	383.8	368.2
55°	467.1	435.9	385.3	344.8	330.1
57.5°	430.5	397.8	348.0	306.7	295.8
60°	390.8	359.6	309.8	269.3	256.9
62.5°	355.0	322.3	270.9	234.3	225.0
65°	317.6	284.1	234.3	200.8	191.5
67.5°	278.7	246.8	200.1	170.5	159.6
70°	242.1	209.4	165.0	139.3	131.6
72.5°	203.2	174.4	133.1	112.1	105.1
75°	168.9	140.1	103.5	85.6	81.0
77.5°	133.1	108.2	77.1	64.6	63.1
80°	98.9	76.3	52.9	50.6	49.8
82.5°	69.3	49.0	38.1	36.6	35.8
85°	42.0	26.5	24.1	22.6	22.6
87.5°	17.9	11.7	10.9	10.1	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)