

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: P1001086

Luminaire Tested: S124RDR-B575DB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001086
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_2700K
Description: Define 4 Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

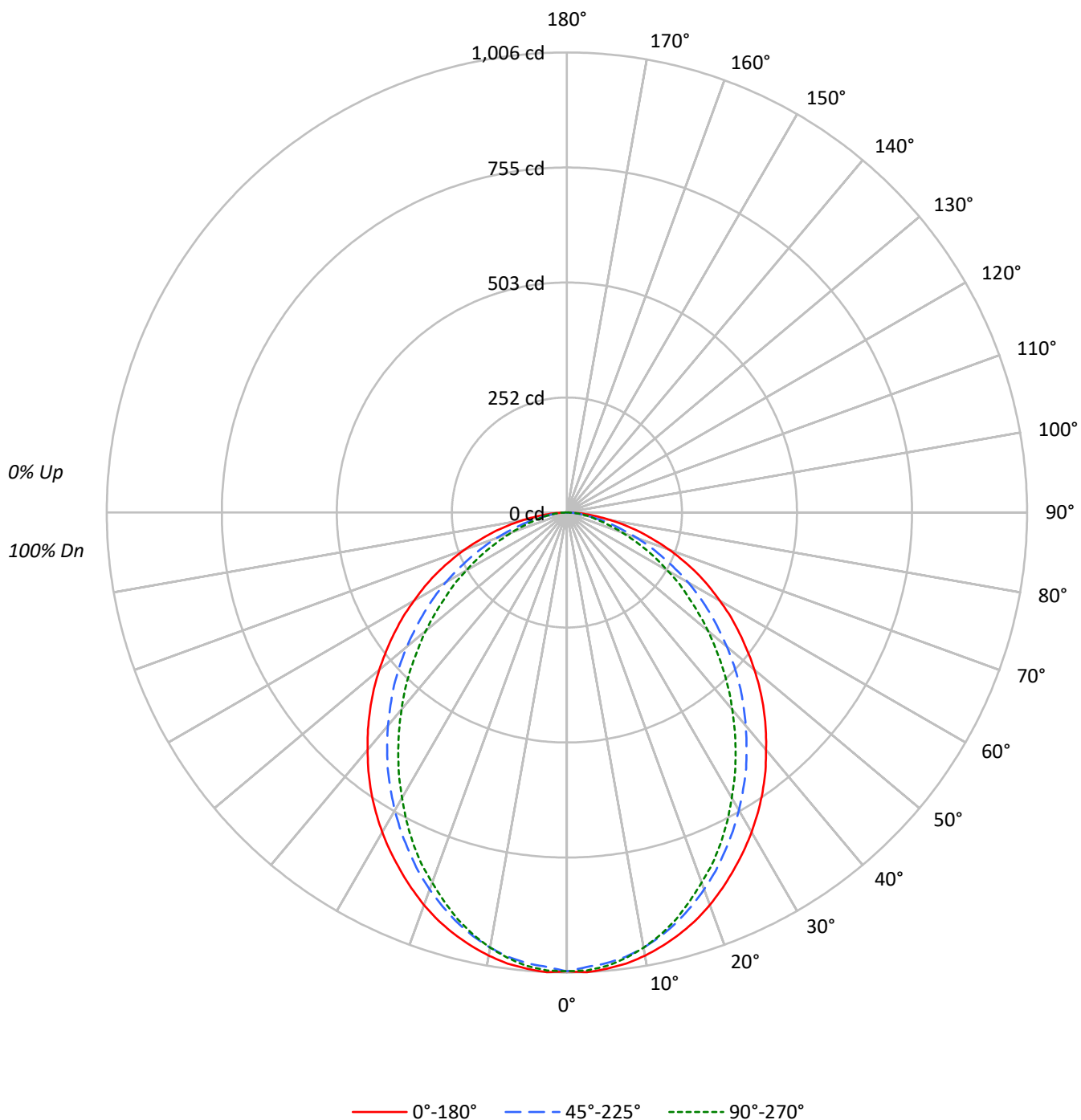
Lumens per Lamp: N/A
Luminaire Lumens: 2318.0 lumens
Efficiency: N/A
Efficacy: 96.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
Input Voltage (V): 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	8181	8181	8181
5°	8200	8099	8149
10°	8148	8001	8001
15°	8054	7833	7775
20°	7925	7612	7472
25°	7761	7354	7167
30°	7602	7081	6784
35°	7425	6798	6400
40°	7212	6476	5986
45°	7016	6157	5563
50°	6792	5789	5116
55°	6553	5405	4630
60°	6289	4986	4134
65°	6047	4461	3647
70°	5696	3881	3095
75°	5252	3220	2517
80°	4583	2451	2310
85°	3883	2227	2086

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7016 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.3	4.1
10°-20°	263.0	11.3
20°-30°	379.7	16.4
30°-40°	430.4	18.6
40°-50°	415.5	17.9
50°-60°	345.5	14.9
60°-70°	238.4	10.3
70°-80°	120.5	5.2
80°-90°	30.6	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°	737.1	31.8
0°-40°	1167.5	50.4
0°-60°	1928.5	83.2
0°-90°	2318.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2318.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1003	1003	1003	1003	1003	
5°	1002	999	989	997	996	95
15°	954	947	928	926	921	269
25°	863	849	817	804	797	397
35°	746	721	683	657	643	466
45°	608	580	534	496	482	469
55°	461	430	380	340	326	412
65°	313	280	231	198	189	309
75°	167	138	102	84	80	176
85°	42	26	24	22	22	48
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1003.2	1003.2	1003.2	1003.2	1003.2
2.5°	1006.3	1003.2	994.8	1003.2	1002.4
5°	1001.7	998.6	989.4	997.1	995.5
7.5°	994.8	991.7	980.2	985.5	983.2
10°	984.0	980.2	966.3	969.4	966.3
12.5°	970.2	965.6	948.7	950.2	945.6
15°	954.0	947.1	927.9	926.4	921.0
17.5°	935.6	925.6	903.3	899.5	891.8
20°	913.3	903.3	877.2	871.1	861.1
22.5°	888.7	877.2	848.8	838.8	831.1
25°	862.6	848.8	817.3	804.2	796.6
27.5°	835.7	818.8	785.8	770.5	759.7
30°	807.3	788.1	752.0	732.8	720.5
32.5°	777.4	755.1	717.4	694.4	682.9
35°	745.9	721.3	682.9	656.8	642.9
37.5°	712.8	687.5	645.2	616.8	603.0
40°	677.5	652.2	608.4	576.1	562.3
42.5°	643.7	616.8	570.7	537.7	523.1
45°	608.4	580.0	533.9	496.2	482.4
47.5°	572.3	543.1	495.5	456.3	440.9
50°	535.4	505.4	456.3	417.9	403.3
52.5°	497.8	468.6	417.9	378.7	363.3
55°	460.9	430.2	380.2	340.3	325.7
57.5°	424.8	392.5	343.4	302.6	291.9
60°	385.6	354.9	305.7	265.8	253.5
62.5°	350.3	318.0	267.3	231.2	222.0
65°	313.4	280.4	231.2	198.2	189.0
67.5°	275.0	243.5	197.4	168.2	157.5
70°	238.9	206.6	162.8	137.5	129.8
72.5°	200.5	172.1	131.4	110.6	103.7
75°	166.7	138.3	102.2	84.5	79.9
77.5°	131.4	106.8	76.0	63.8	62.2
80°	97.6	75.3	52.2	49.9	49.2
82.5°	68.4	48.4	37.6	36.1	35.3
85°	41.5	26.1	23.8	22.3	22.3
87.5°	17.7	11.5	10.8	10.0	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)