

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: P1001089

Luminaire Tested: S124RDR-B575DB2750-4F0-XX-W2A-F_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001089
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_4000K
Description: Define 4 Regressed Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

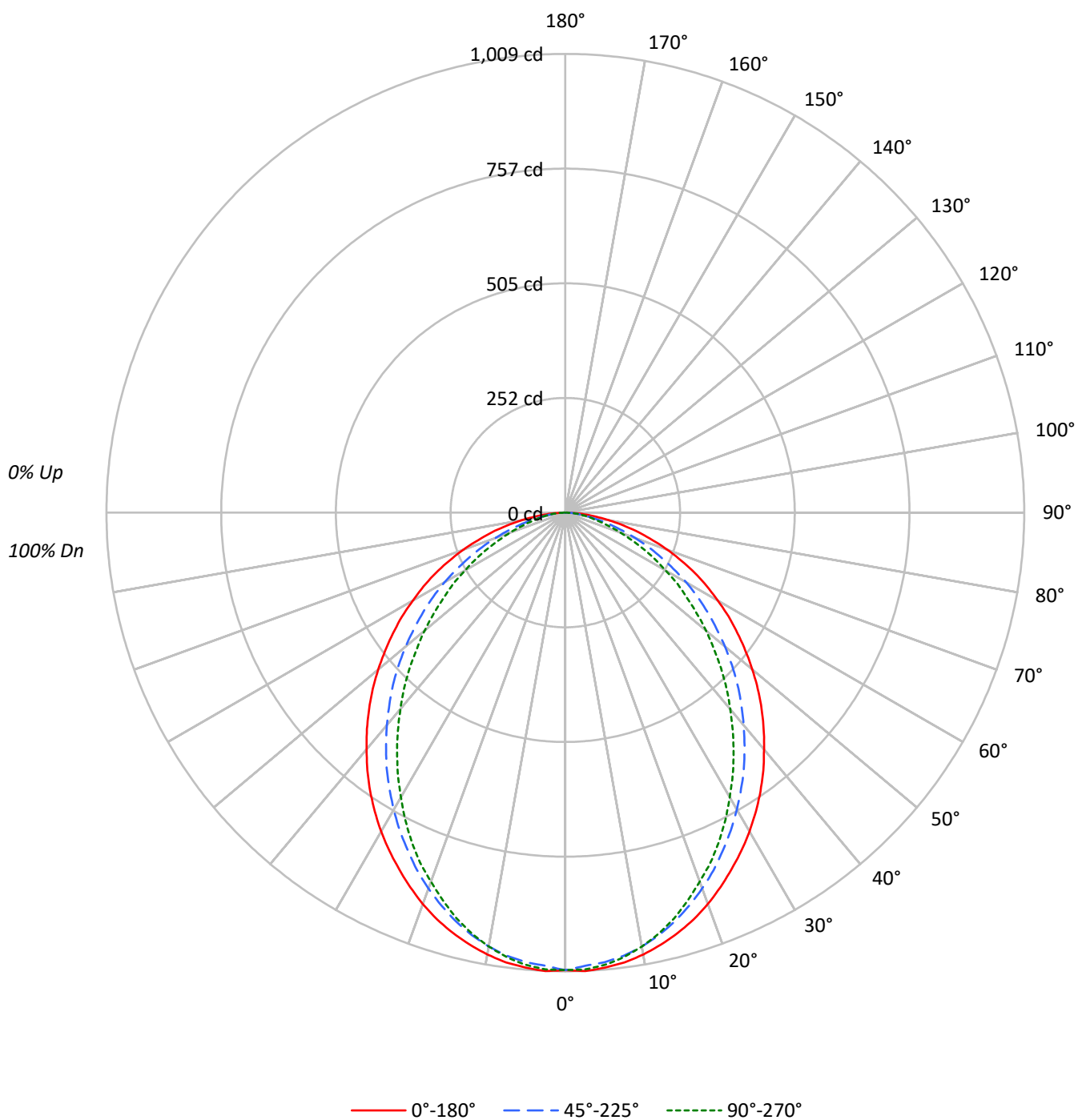
Lumens per Lamp: N/A
Luminaire Lumens: 2325.0 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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		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°	8205	8205	8205
5°	8224	8123	8173
10°	8173	8025	8025
15°	8078	7857	7799
20°	7950	7636	7495
25°	7785	7376	7189
30°	7625	7102	6805
35°	7447	6818	6420
40°	7234	6496	6004
45°	7037	6175	5580
50°	6812	5806	5132
55°	6572	5422	4645
60°	6308	5000	4147
65°	6066	4475	3656
70°	5713	3893	3104
75°	5268	3229	2524
80°	4593	2461	2315
85°	3892	2236	2086

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7037 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.6	4.1
10°-20°	263.8	11.3
20°-30°	380.9	16.4
30°-40°	431.7	18.6
40°-50°	416.8	17.9
50°-60°	346.5	14.9
60°-70°	239.2	10.3
70°-80°	120.8	5.2
80°-90°	30.7	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°	739.3	31.8
0°-40°	1171.0	50.4
0°-60°	1934.3	83.2
0°-90°	2325.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2325.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	1005	1002	992	1000	998	95
15°	957	950	931	929	924	270
25°	865	851	820	807	799	399
35°	748	724	685	659	645	468
45°	610	582	536	498	484	471
55°	462	432	381	341	327	414
65°	314	281	232	199	190	310
75°	167	139	102	85	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°	1006.2	1006.2	1006.2	1006.2	1006.2
2.5°	1009.3	1006.2	997.8	1006.2	1005.5
5°	1004.7	1001.6	992.4	1000.1	998.5
7.5°	997.8	994.7	983.1	988.5	986.2
10°	987.0	983.1	969.2	972.3	969.2
12.5°	973.1	968.5	951.5	953.1	948.4
15°	956.9	950.0	930.7	929.2	923.8
17.5°	938.4	928.4	906.1	902.2	894.5
20°	916.1	906.1	879.9	873.7	863.7
22.5°	891.4	879.9	851.4	841.3	833.6
25°	865.2	851.4	819.8	806.7	799.0
27.5°	838.3	821.3	788.2	772.8	762.0
30°	809.8	790.5	754.3	735.0	722.7
32.5°	779.7	757.4	719.6	696.5	684.9
35°	748.1	723.5	684.9	658.7	644.9
37.5°	715.0	689.6	647.2	618.7	604.8
40°	679.6	654.1	610.2	577.8	564.0
42.5°	645.7	618.7	572.5	539.3	524.7
45°	610.2	581.7	535.5	497.7	483.9
47.5°	574.0	544.7	497.0	457.7	442.2
50°	537.0	507.0	457.7	419.1	404.5
52.5°	499.3	470.0	419.1	379.8	364.4
55°	462.3	431.5	381.4	341.3	326.7
57.5°	426.1	393.7	344.4	303.6	292.8
60°	386.8	356.0	306.6	266.6	254.3
62.5°	351.3	319.0	268.1	231.9	222.7
65°	314.4	281.2	231.9	198.8	189.5
67.5°	275.8	244.2	198.0	168.7	157.9
70°	239.6	207.3	163.3	137.9	130.2
72.5°	201.1	172.6	131.7	110.9	104.0
75°	167.2	138.7	102.5	84.8	80.1
77.5°	131.7	107.1	76.3	63.9	62.4
80°	97.8	75.5	52.4	50.1	49.3
82.5°	68.6	48.5	37.8	36.2	35.4
85°	41.6	26.2	23.9	22.3	22.3
87.5°	17.7	11.6	10.8	10.0	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)