

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: P1001098

Luminaire Tested: S124RDR-B575DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001098
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-B575DB50-4F0-XX-W2A-F
Description: Define 4 Regressed Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

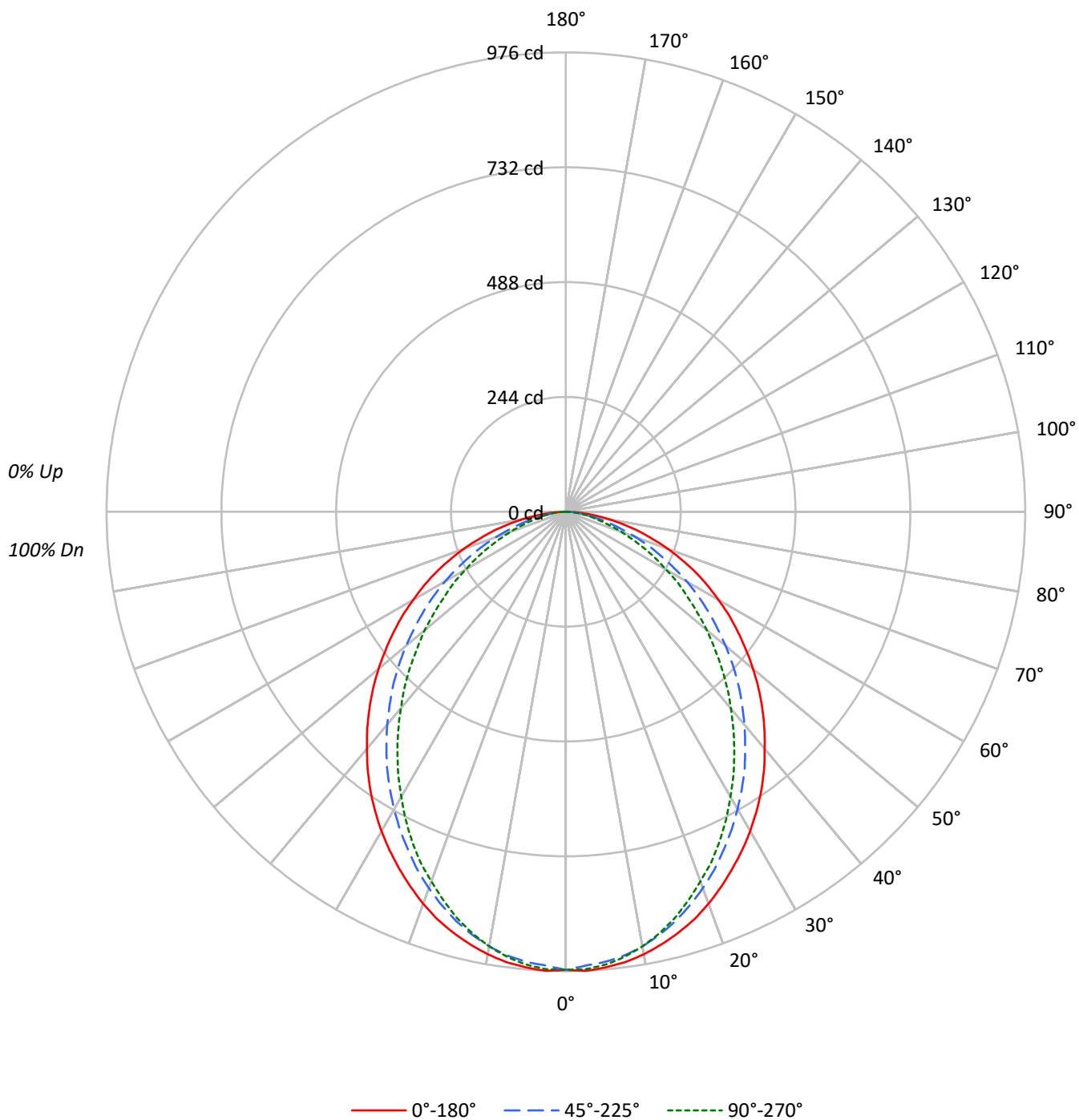
Lumens per Lamp: N/A
Luminaire Lumens: 2249.0 lumens
Efficiency: N/A
Efficacy: 93.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	105	101	98	107	103	99	96	99	96	93		95	92	90		91
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81
3	92	82	74	68	89	80	73	67	77	71	66		75	69	65		72
4	84	73	65	58	82	72	64	58	69	62	57		67	61	56		65
5	78	66	57	51	76	65	56	50	62	55	50		61	54	49		59
6	72	59	51	45	70	58	50	44	57	49	44		55	49	44		53
7	67	54	46	40	65	53	45	40	52	45	39		50	44	39		49
8	63	50	41	36	61	49	41	36	48	40	35		46	40	35		45
9	59	46	38	32	57	45	37	32	44	37	32		43	36	32		42
10	55	42	35	29	54	42	34	29	41	34	29		40	33	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7937	7937	7937
5°	7955	7857	7906
10°	7905	7764	7764
15°	7814	7600	7544
20°	7689	7386	7250
25°	7531	7135	6954
30°	7376	6870	6583
35°	7204	6596	6210
40°	6997	6284	5807
45°	6807	5974	5397
50°	6590	5616	4964
55°	6358	5245	4493
60°	6101	4837	4010
65°	5868	4328	3537
70°	5527	3767	3004
75°	5095	3122	2442
80°	4447	2381	2240
85°	3761	2161	2021

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6807 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	4.1
10°-20°	255.2	11.3
20°-30°	368.4	16.4
30°-40°	417.6	18.6
40°-50°	403.2	17.9
50°-60°	335.2	14.9
60°-70°	231.3	10.3
70°-80°	116.9	5.2
80°-90°	29.7	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°	715.2	31.8
0°-40°	1132.7	50.4
0°-60°	1871.1	83.2
0°-90°	2249.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2249.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	973	973	973	973	973	
5°	972	969	960	967	966	92
15°	926	919	900	899	894	261
25°	837	824	793	780	773	386
35°	724	700	663	637	624	452
45°	590	563	518	482	468	455
55°	447	417	369	330	316	400
65°	304	272	224	192	183	300
75°	162	134	99	82	78	171
85°	40	25	23	22	22	47
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	973.3	973.3	973.3	973.3	973.3
2.5°	976.3	973.3	965.1	973.3	972.6
5°	971.8	968.9	959.9	967.4	965.9
7.5°	965.1	962.2	951.0	956.2	954.0
10°	954.7	951.0	937.6	940.5	937.6
12.5°	941.3	936.8	920.4	921.9	917.4
15°	925.6	918.9	900.3	898.8	893.6
17.5°	907.8	898.1	876.5	872.7	865.3
20°	886.1	876.5	851.1	845.1	835.5
22.5°	862.3	851.1	823.5	813.8	806.4
25°	837.0	823.5	793.0	780.3	772.9
27.5°	810.9	794.5	762.4	747.5	737.1
30°	783.3	764.7	729.6	711.0	699.1
32.5°	754.2	732.6	696.1	673.7	662.6
35°	723.7	699.8	662.6	637.2	623.8
37.5°	691.6	667.0	626.0	598.5	585.0
40°	657.3	632.7	590.3	559.0	545.5
42.5°	624.5	598.5	553.7	521.7	507.5
45°	590.3	562.7	518.0	481.5	468.0
47.5°	555.2	526.9	480.7	442.7	427.8
50°	519.5	490.4	442.7	405.4	391.3
52.5°	482.9	454.6	405.4	367.4	352.5
55°	447.2	417.4	368.9	330.2	316.0
57.5°	412.1	380.8	333.1	293.6	283.2
60°	374.1	344.3	296.6	257.9	245.9
62.5°	339.8	308.5	259.4	224.3	215.4
65°	304.1	272.0	224.3	192.3	183.3
67.5°	266.8	236.3	191.5	163.2	152.8
70°	231.8	200.5	158.0	133.4	126.0
72.5°	194.5	166.9	127.4	107.3	100.6
75°	161.7	134.2	99.1	82.0	77.5
77.5°	127.4	103.6	73.8	61.9	60.4
80°	94.7	73.0	50.7	48.4	47.7
82.5°	66.3	47.0	36.5	35.0	34.3
85°	40.2	25.3	23.1	21.6	21.6
87.5°	17.1	11.2	10.4	9.7	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)