

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: P998529

Luminaire Tested: S124DR-B575DB30-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P998529
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DR-B575DB30-4F0-XX-W2A-F
Description: Define 4 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

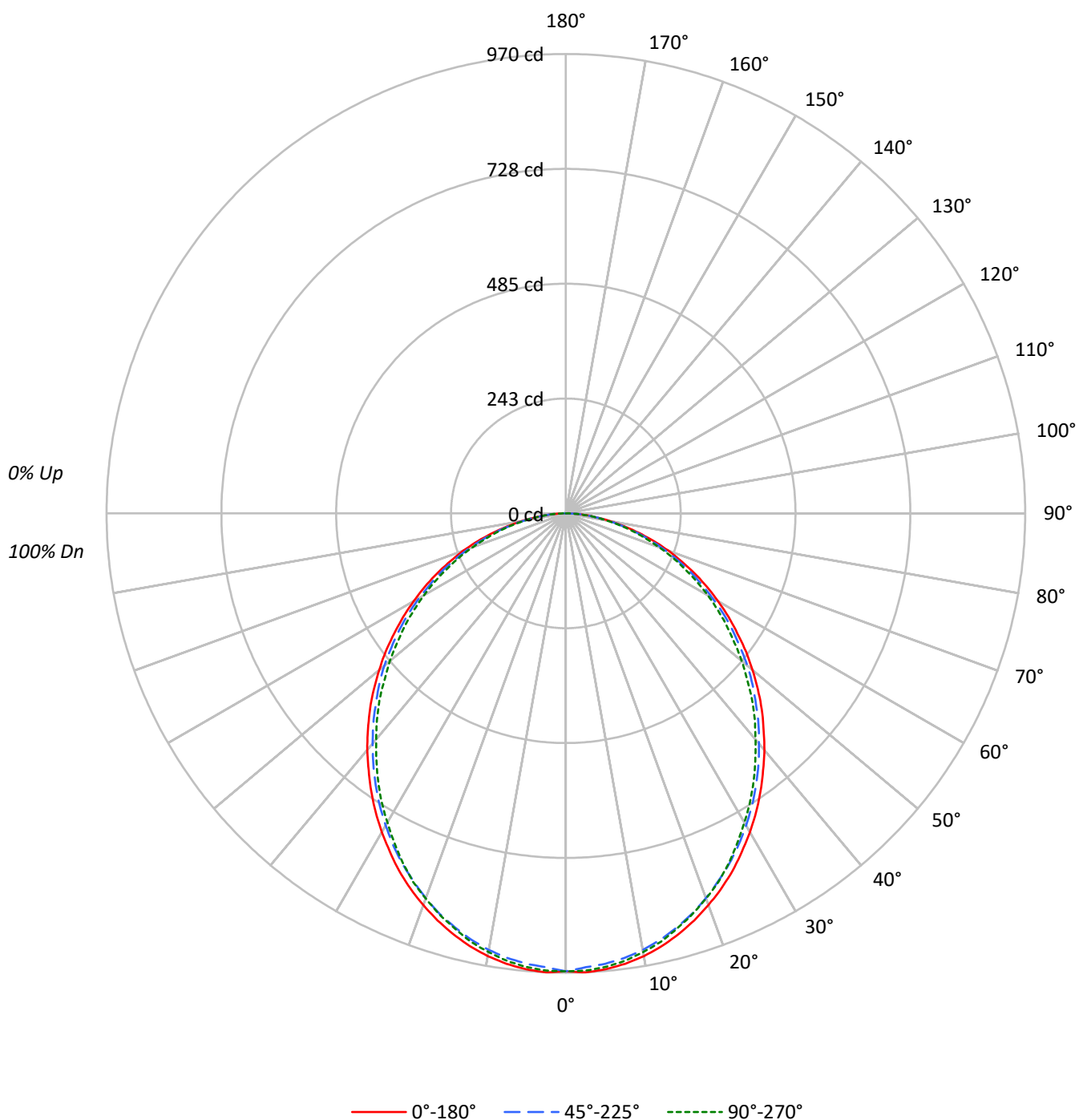
Lumens per Lamp: N/A
Luminaire Lumens: 2482.0 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		79
3	91	80	72	66	88	79	71	65	76	69	64		73	67	63		70
4	83	71	63	56	81	70	62	56	67	60	55		65	59	54		63
5	77	64	55	48	74	63	54	48	61	53	48		59	52	47		57
6	71	58	49	42	69	57	48	42	55	47	42		53	47	41		52
7	66	52	44	38	64	52	43	37	50	43	37		49	42	37		47
8	61	48	39	34	60	47	39	34	46	39	33		45	38	33		43
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40
10	54	41	33	28	52	40	33	28	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7885	7885	7885
5°	7909	7814	7871
10°	7860	7750	7789
15°	7764	7640	7660
20°	7638	7504	7511
25°	7495	7348	7328
30°	7318	7165	7099
35°	7135	6973	6881
40°	6945	6755	6632
45°	6746	6541	6415
50°	6527	6349	6154
55°	6290	6103	5904
60°	6052	5826	5649
65°	5787	5561	5337
70°	5486	5210	5007
75°	5028	4786	4663
80°	4475	4292	4184
85°	3911	3771	3696

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6746 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.1	3.7
10°-20°	256.8	10.3
20°-30°	377.9	15.2
30°-40°	439.3	17.7
40°-50°	439.3	17.7
50°-60°	384.2	15.5
60°-70°	285.2	11.5
70°-80°	161.8	6.5
80°-90°	46.3	1.9
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°	725.8	29.2
0°-40°	1165.1	46.9
0°-60°	1988.6	80.1
0°-90°	2482.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2482.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	967	967	967	967	967	
5°	966	963	955	963	962	92
15°	920	917	905	910	907	259
25°	833	828	817	818	814	383
35°	717	711	700	695	691	448
45°	585	580	567	559	556	451
55°	442	440	429	420	415	396
65°	300	296	288	280	277	297
75°	160	156	152	149	148	169
85°	42	42	40	40	40	48
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	967.0	967.0	967.0	967.0	967.0
2.5°	970.1	967.8	959.3	967.0	966.2
5°	966.2	963.1	954.6	963.1	961.6
7.5°	959.3	956.2	946.9	953.8	953.1
10°	949.2	946.1	936.0	942.2	940.7
12.5°	936.0	932.9	922.1	929.0	926.7
15°	919.7	916.6	905.0	909.7	907.3
17.5°	901.1	897.3	886.4	889.5	888.0
20°	880.2	876.3	864.7	867.0	865.5
22.5°	857.7	852.3	840.7	845.4	842.3
25°	833.0	827.5	816.7	817.5	814.4
27.5°	805.1	799.6	789.6	788.0	784.1
30°	777.2	771.0	760.9	757.8	753.9
32.5°	747.7	742.3	731.5	727.6	723.7
35°	716.7	711.3	700.5	695.0	691.2
37.5°	684.2	679.5	667.9	662.5	657.1
40°	652.4	646.2	634.6	626.8	623.0
42.5°	618.3	615.2	602.1	592.8	590.4
45°	585.0	579.6	567.2	558.7	556.3
47.5°	550.1	546.3	534.6	525.3	519.1
50°	514.5	511.4	500.5	489.7	485.1
52.5°	479.6	475.8	464.1	454.8	448.6
55°	442.4	440.1	429.3	420.0	415.3
57.5°	407.6	405.2	394.4	385.1	380.4
60°	371.1	367.3	357.2	350.2	346.4
62.5°	335.5	332.4	321.6	315.4	311.5
65°	299.9	296.0	288.2	280.5	276.6
67.5°	263.4	260.3	252.6	244.8	244.1
70°	230.1	224.7	218.5	212.3	210.0
72.5°	194.5	189.1	184.4	179.8	177.4
75°	159.6	155.7	151.9	148.8	148.0
77.5°	125.5	124.0	120.1	119.3	117.0
80°	95.3	93.0	91.4	89.9	89.1
82.5°	65.9	65.1	65.1	64.3	63.5
85°	41.8	41.8	40.3	40.3	39.5
87.5°	20.1	19.4	18.6	18.6	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)