

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: P1031836

Luminaire Tested: S123DIW-B560D755UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031836
REPORT IS A COMBINATION OF REPORTS P991833 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D755UB50-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

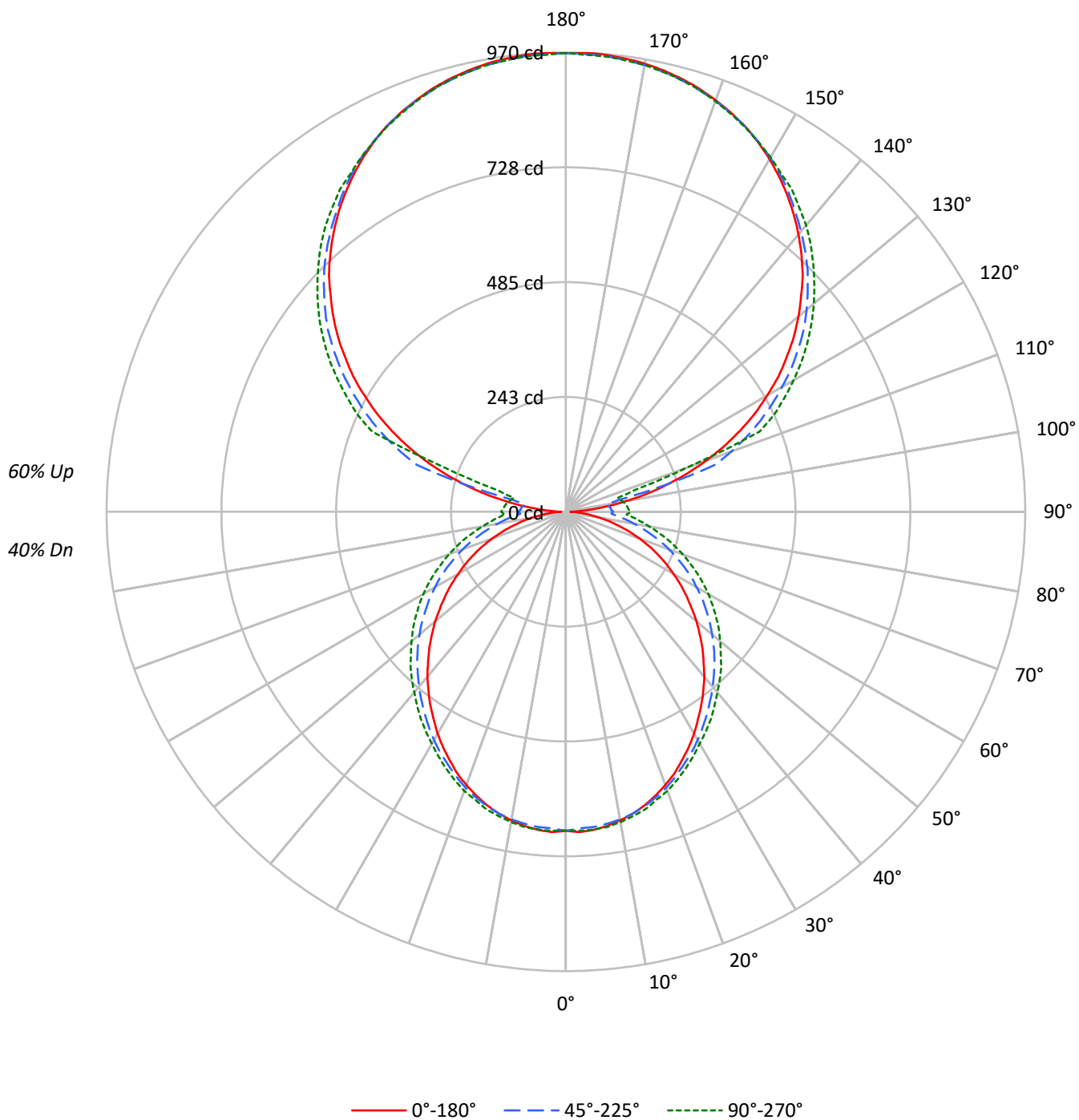
Lumens per Lamp: N/A
Luminaire Lumens: 5218.0 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 47.2
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	30	10
RCR																	
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47
1	95	90	86	82	86	82	78	75	67	64	62	53	51	49	40	39	38
2	86	78	72	66	78	71	66	61	58	54	51	46	43	41	35	33	31
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26
4	71	60	52	46	64	55	48	43	45	40	36	36	32	29	27	24	22
5	65	54	45	39	59	49	42	36	40	35	30	32	28	25	24	21	19
6	60	48	40	34	54	44	37	31	36	31	26	29	25	22	22	19	17
7	55	43	35	29	50	39	32	27	33	27	23	26	22	19	20	17	15
8	51	39	31	26	46	36	29	24	30	24	20	24	20	17	18	15	13
9	48	35	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12
10	45	32	25	20	40	30	23	19	25	20	16	20	16	14	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7248	7248	7248
5°	7268	7035	7030
10°	7200	6845	6793
15°	7104	6634	6541
20°	6969	6400	6270
25°	6803	6136	5991
30°	6632	5896	5710
35°	6442	5646	5482
40°	6259	5416	5239
45°	6056	5195	5041
50°	5856	4974	4824
55°	5635	4748	4626
60°	5419	4518	4422
65°	5195	4272	4183
70°	4859	3996	3937
75°	4435	3681	3684
80°	3941	3363	3395
85°	3448	3105	3187

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6056 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.9	1.2
10°-20°	182.1	3.5
20°-30°	272.3	5.2
30°-40°	325.1	6.2
40°-50°	340.2	6.5
50°-60°	319.2	6.1
60°-70°	266.6	5.1
70°-80°	190.7	3.7
80°-90°	115.4	2.2
90°-100°	105.4	2.0
100°-110°	217.6	4.2
110°-120°	439.7	8.4
120°-130°	533.7	10.2
130°-140°	557.8	10.7
140°-150°	515.1	9.9
150°-160°	414.0	7.9
160°-170°	267.2	5.1
170°-180°	92.1	1.8
0°-30°	518.3	9.9
0°-40°	843.4	16.2
0°-60°	1502.8	28.8
0°-90°	2075.5	39.8
90°-120°	762.7	14.6
90°-150°	2369.3	45.4
90°-180°	3143.0	60.2
0°-180°	5218.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	673	673	673	673	673	
5°	674	673	668	674	673	64
15°	642	644	643	651	650	181
25°	580	587	589	598	598	267
35°	499	510	520	531	534	312
45°	408	425	444	458	464	314
55°	311	335	362	381	387	278
65°	215	244	276	298	305	212
75°	117	151	188	212	221	125
85°	36	73	112	136	144	37
90°	10	53	100	128	137	9
95°	52	51	95	123	130	59
105°	220	246	213	106	114	233
115°	406	419	452	477	486	401
125°	569	575	599	616	623	509
135°	708	711	722	737	739	545
145°	815	820	821	828	831	510
155°	897	896	897	900	896	414
165°	946	944	944	949	944	267
175°	969	965	966	971	965	92
180°	969	969	969	969	969	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	673.4	673.4	673.4	673.4	673.4
2.5°	677.0	674.8	669.0	674.8	674.1
5°	674.1	672.6	668.2	674.1	673.4
7.5°	669.0	669.0	664.6	671.9	671.2
10°	661.6	663.1	659.4	666.8	665.3
12.5°	652.8	655.0	652.8	659.4	658.0
15°	641.8	644.0	643.3	650.6	649.9
17.5°	628.6	633.0	632.3	638.9	637.4
20°	613.9	618.3	619.8	626.4	627.1
22.5°	598.5	602.9	605.1	613.9	613.2
25°	579.5	586.8	589.0	598.5	598.5
27.5°	561.1	569.2	573.6	581.7	582.4
30°	541.3	550.9	556.7	565.5	565.5
32.5°	519.3	530.3	538.4	547.9	550.1
35°	498.8	510.5	520.1	531.1	534.0
37.5°	476.8	490.0	501.0	513.5	515.7
40°	454.8	468.0	482.6	495.1	498.0
42.5°	430.6	447.4	462.8	476.8	481.2
45°	407.8	425.4	443.8	457.7	463.6
47.5°	383.6	403.4	424.0	439.4	443.8
50°	360.1	380.7	403.4	420.3	425.4
52.5°	335.2	357.2	382.9	400.5	407.1
55°	311.0	335.2	361.6	381.4	387.3
57.5°	287.5	312.5	341.1	360.9	367.5
60°	262.6	289.0	319.1	339.6	347.7
62.5°	239.1	266.3	298.5	319.1	326.4
65°	214.9	243.5	275.8	297.8	305.1
67.5°	190.7	220.8	253.1	277.3	283.1
70°	165.0	196.6	231.8	255.3	262.6
72.5°	141.6	173.1	209.8	234.0	241.3
75°	116.6	151.1	187.8	212.0	220.8
77.5°	95.4	129.8	166.5	192.2	198.8
80°	72.6	108.6	146.7	171.6	179.0
82.5°	52.8	89.5	128.4	153.3	160.6
85°	35.9	72.6	111.5	136.4	143.8
87.5°	22.0	58.7	96.1	121.0	128.4
90°	10.2	53.4	100.2	128.0	136.8
92.5°	25.4	52.5	95.7	124.9	132.3
95°	52.0	51.1	94.9	122.7	130.0
97.5°	87.2	93.4	91.2	119.0	127.1
100°	128.2	166.1	87.5	114.6	122.6
102.5°	175.0	204.9	112.7	109.5	118.2
105°	220.4	245.9	212.6	105.8	113.9
107.5°	267.8	289.7	330.5	239.5	151.8
110°	315.3	334.3	371.5	366.8	269.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	361.4	376.7	412.4	437.3	442.4
115°	406.0	419.1	452.0	476.8	485.5
117.5°	450.6	461.4	490.0	513.4	519.9
120°	490.8	501.0	527.4	550.0	555.1
122.5°	532.6	539.1	564.7	584.5	590.3
125°	569.3	575.1	599.2	616.1	622.6
127.5°	606.7	611.8	633.7	650.5	654.2
130°	641.3	646.3	663.8	680.7	683.6
132.5°	673.7	679.4	692.6	708.7	711.6
135°	707.5	711.0	722.0	737.3	738.9
137.5°	736.3	741.2	747.9	763.2	765.4
140°	764.3	768.6	772.9	786.8	789.1
142.5°	790.9	794.5	796.7	808.3	809.9
145°	815.4	819.7	821.1	828.5	831.4
147.5°	838.4	842.0	843.4	847.1	846.4
150°	860.0	862.2	863.6	865.0	864.4
152.5°	879.4	880.1	880.9	883.7	880.1
155°	897.4	896.0	896.7	900.3	896.0
157.5°	911.8	911.8	911.1	915.4	909.7
160°	924.8	924.0	923.3	927.6	922.6
162.5°	937.0	934.8	934.1	939.2	934.8
165°	946.4	944.2	943.5	949.2	944.2
167.5°	954.3	951.4	951.4	957.2	951.4
170°	960.8	957.9	957.9	963.6	957.9
172.5°	965.1	961.5	962.2	967.9	961.5
175°	968.7	965.1	965.8	970.8	965.1
177.5°	970.1	966.5	967.2	973.0	965.8
180°	968.7	968.7	968.7	968.7	968.7

(END OF REPORT)