

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: P1031830

Luminaire Tested: S123DIW-B560D755UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031830
REPORT IS A COMBINATION OF REPORTS P991824 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D755UB40-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

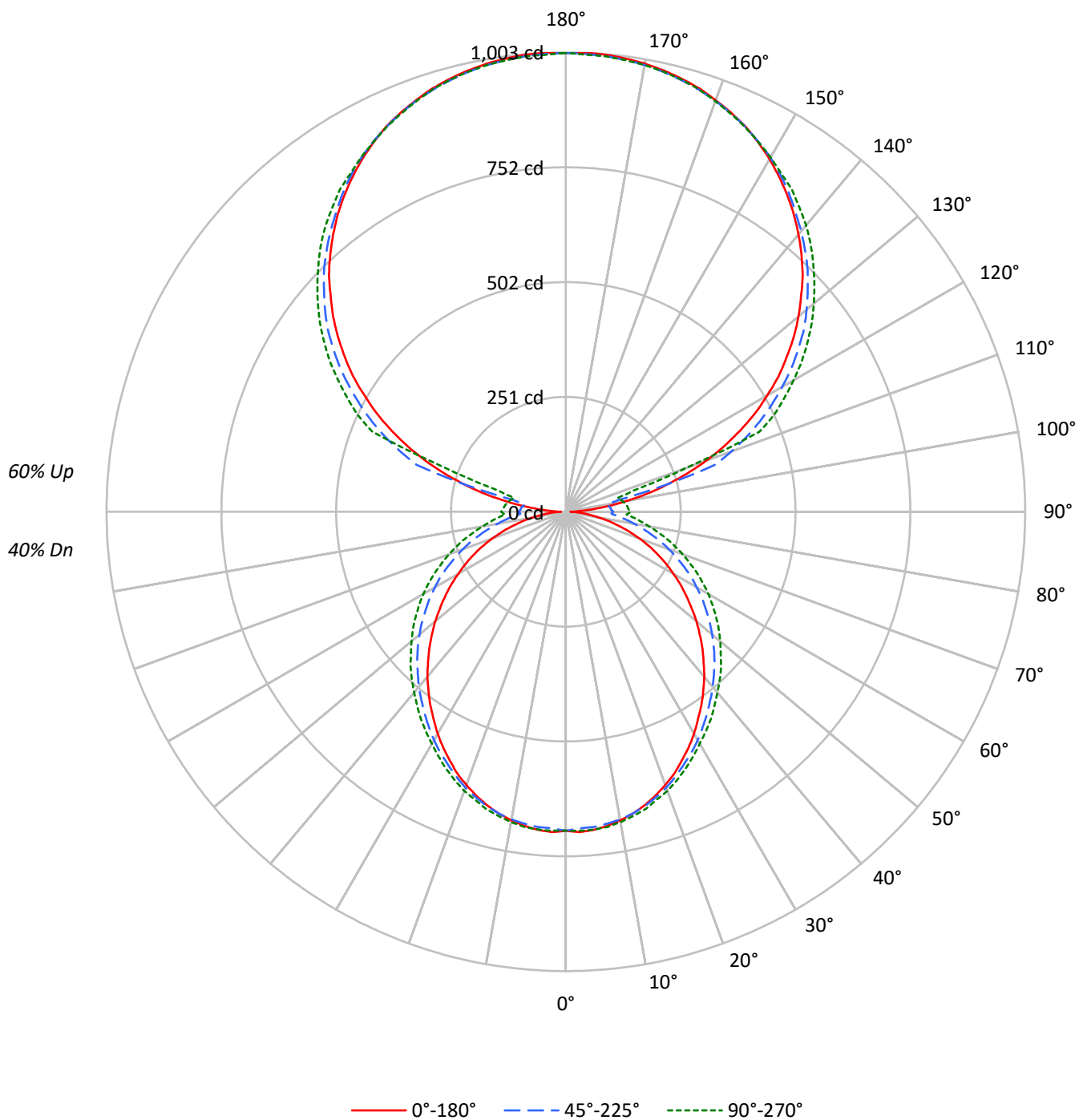
Lumens per Lamp: N/A
Luminaire Lumens: 5396.1 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	7495	7495	7495
5°	7515	7275	7269
10°	7444	7078	7023
15°	7347	6860	6764
20°	7206	6618	6484
25°	7034	6344	6195
30°	6858	6097	5905
35°	6661	5837	5668
40°	6471	5601	5418
45°	6263	5371	5212
50°	6056	5144	4988
55°	5827	4910	4783
60°	5602	4671	4572
65°	5371	4417	4325
70°	5027	4132	4071
75°	4588	3807	3809
80°	4077	3477	3510
85°	3573	3211	3296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6263 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.0	1.2
10°-20°	188.3	3.5
20°-30°	281.6	5.2
30°-40°	336.2	6.2
40°-50°	351.8	6.5
50°-60°	330.1	6.1
60°-70°	275.7	5.1
70°-80°	197.1	3.7
80°-90°	119.3	2.2
90°-100°	109.1	2.0
100°-110°	225.0	4.2
110°-120°	454.7	8.4
120°-130°	552.0	10.2
130°-140°	576.9	10.7
140°-150°	532.7	9.9
150°-160°	428.1	7.9
160°-170°	276.3	5.1
170°-180°	95.2	1.8
0°-30°	535.9	9.9
0°-40°	872.1	16.2
0°-60°	1553.9	28.8
0°-90°	2146.1	39.8
90°-120°	788.8	14.6
90°-150°	2450.4	45.4
90°-180°	3250.0	60.2
0°-180°	5396.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	696	696	696	696	696	
5°	697	696	691	697	696	66
15°	664	666	665	673	672	187
25°	599	607	609	619	619	276
35°	516	528	538	549	552	323
45°	422	440	459	473	479	325
55°	322	347	374	394	400	288
65°	222	252	285	308	316	220
75°	121	156	194	219	228	129
85°	37	75	115	141	149	38
90°	11	55	104	132	141	10
95°	54	53	98	127	134	61
105°	228	254	220	109	118	241
115°	420	433	467	493	502	415
125°	589	595	620	637	644	526
135°	732	735	747	763	764	563
145°	843	848	849	857	860	528
155°	928	927	927	931	927	428
165°	979	976	976	982	976	277
175°	1002	998	999	1004	998	95
180°	1002	1002	1002	1002	1002	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	696.3	696.3	696.3	696.3	696.3
2.5°	700.1	697.8	691.7	697.8	697.0
5°	697.0	695.5	691.0	697.0	696.3
7.5°	691.7	691.7	687.2	694.7	694.0
10°	684.1	685.6	681.9	689.4	687.9
12.5°	675.0	677.3	675.0	681.9	680.3
15°	663.7	665.9	665.2	672.8	672.0
17.5°	650.0	654.6	653.8	660.6	659.1
20°	634.8	639.4	640.9	647.7	648.5
22.5°	618.9	623.5	625.7	634.8	634.1
25°	599.2	606.8	609.0	618.9	618.9
27.5°	580.2	588.6	593.1	601.5	602.2
30°	559.7	569.6	575.7	584.8	584.8
32.5°	537.0	548.4	556.7	566.6	568.8
35°	515.8	527.9	537.7	549.1	552.2
37.5°	493.0	506.7	518.0	530.9	533.2
40°	470.2	483.9	499.1	512.0	515.0
42.5°	445.2	462.7	478.6	493.0	497.5
45°	421.7	439.9	458.9	473.3	479.3
47.5°	396.7	417.2	438.4	454.3	458.9
50°	372.4	393.6	417.2	434.6	439.9
52.5°	346.6	369.4	395.9	414.1	420.9
55°	321.6	346.6	373.9	394.4	400.5
57.5°	297.3	323.1	352.7	373.2	380.0
60°	271.5	298.8	329.9	351.2	359.5
62.5°	247.3	275.3	308.7	329.9	337.5
65°	222.2	251.8	285.2	307.9	315.5
67.5°	197.2	228.3	261.7	286.7	292.8
70°	170.7	203.3	239.7	263.9	271.5
72.5°	146.4	179.0	216.9	241.9	249.5
75°	120.6	156.2	194.2	219.2	228.3
77.5°	98.6	134.2	172.2	198.7	205.5
80°	75.1	112.3	151.7	177.5	185.1
82.5°	54.6	92.5	132.7	158.5	166.1
85°	37.2	75.1	115.3	141.1	148.7
87.5°	22.8	60.7	99.4	125.1	132.7
90°	10.6	55.2	103.6	132.3	141.4
92.5°	26.2	54.4	99.0	129.3	136.8
95°	53.7	52.8	98.2	126.9	134.5
97.5°	90.2	96.7	94.3	123.1	131.4
100°	132.6	171.8	90.6	118.5	126.9
102.5°	181.0	211.9	116.5	113.2	122.3
105°	227.9	254.3	219.9	109.4	117.6
107.5°	277.0	299.6	341.8	247.7	157.0
110°	326.1	345.7	384.2	379.4	279.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	373.8	389.6	426.6	452.2	457.6
115°	419.8	433.4	467.4	493.0	502.1
117.5°	466.0	477.3	506.7	531.0	537.7
120°	507.6	518.1	545.4	568.8	574.1
122.5°	550.8	557.6	584.1	604.4	610.5
125°	588.8	594.7	619.7	637.1	643.9
127.5°	627.5	632.6	655.4	672.7	676.6
130°	663.2	668.4	686.5	703.9	706.9
132.5°	696.6	702.6	716.2	732.8	736.0
135°	731.6	735.4	746.7	762.6	764.1
137.5°	761.4	766.6	773.4	789.3	791.6
140°	790.5	794.9	799.4	813.7	816.0
142.5°	818.0	821.7	823.9	836.0	837.6
145°	843.3	847.7	849.2	856.8	859.8
147.5°	867.1	870.8	872.3	876.1	875.3
150°	889.4	891.6	893.1	894.6	893.9
152.5°	909.5	910.2	911.0	914.0	910.2
155°	928.1	926.6	927.3	931.1	926.6
157.5°	943.0	943.0	942.2	946.7	940.7
160°	956.4	955.6	954.9	959.4	954.1
162.5°	969.0	966.8	966.1	971.3	966.8
165°	978.7	976.5	975.7	981.7	976.5
167.5°	986.9	983.9	983.9	989.9	983.9
170°	993.6	990.6	990.6	996.6	990.6
172.5°	998.1	994.3	995.1	1001.0	994.3
175°	1001.8	998.1	998.8	1004.0	998.1
177.5°	1003.3	999.5	1000.3	1006.2	998.8
180°	1001.8	1001.8	1001.8	1001.8	1001.8

(END OF REPORT)