

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: P1031530

Luminaire Tested: S123DIW-B1165D755UB30-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031530
REPORT IS A COMBINATION OF REPORTS P991146 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D755UB30-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

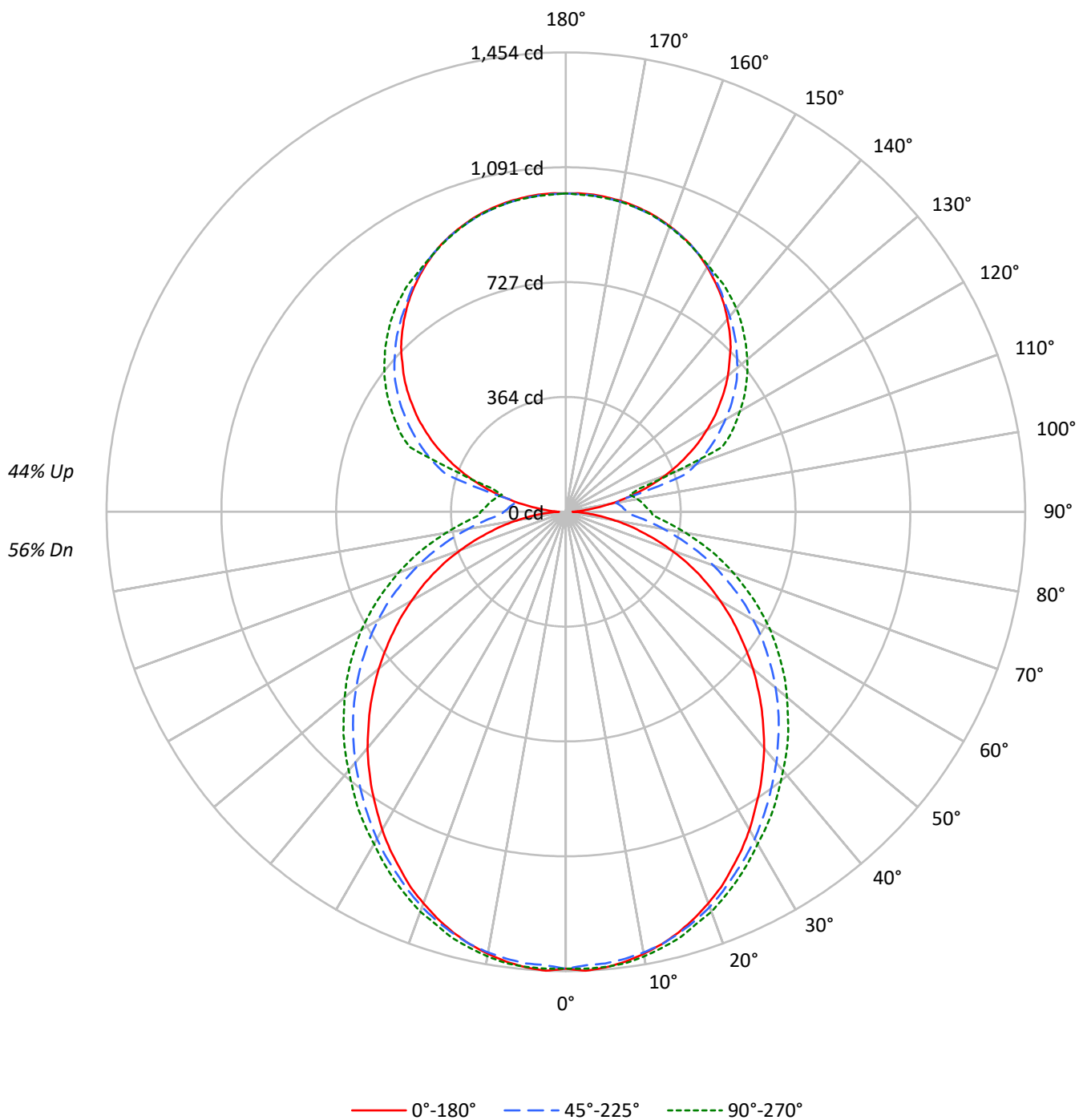
Lumens per Lamp: N/A
Luminaire Lumens: 7934.0 lumens
Efficiency: N/A
Efficacy: 93.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 84.5
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	98	93	89	85	91	87	83	79	74	71	69	63	61	59	53	51	50
2	89	81	74	68	82	75	69	64	64	60	56	55	51	48	46	43	41
3	81	71	63	56	75	66	59	53	56	51	47	48	44	40	40	37	34
4	74	62	54	47	68	58	50	45	50	44	39	43	38	34	36	32	29
5	68	55	47	40	62	52	44	38	45	39	34	38	33	30	32	28	25
6	62	50	41	35	57	46	39	33	40	34	29	34	30	26	29	25	22
7	57	45	36	31	53	42	34	29	36	30	26	31	26	23	26	23	20
8	53	41	32	27	49	38	31	26	33	27	23	29	24	20	24	20	18
9	50	37	29	24	46	35	28	23	30	25	20	26	22	18	22	19	16
10	46	34	26	22	43	32	25	20	28	22	18	24	20	16	21	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15566	15566	15566
5°	15608	15109	15097
10°	15462	14700	14588
15°	15258	14248	14048
20°	14967	13744	13467
25°	14610	13176	12866
30°	14243	12663	12263
35°	13834	12125	11772
40°	13442	11631	11252
45°	13007	11155	10825
50°	12578	10683	10361
55°	12102	10197	9933
60°	11636	9701	9496
65°	11159	9174	8984
70°	10437	8581	8455
75°	9529	7906	7911
80°	8469	7223	7290
85°	7415	6667	6844

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13007 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.2	1.7
10°-20°	391.1	4.9
20°-30°	584.8	7.4
30°-40°	698.2	8.8
40°-50°	730.6	9.2
50°-60°	685.6	8.6
60°-70°	572.6	7.2
70°-80°	409.5	5.2
80°-90°	245.7	3.1
90°-100°	188.6	2.4
100°-110°	284.3	3.6
110°-120°	496.1	6.3
120°-130°	577.3	7.3
130°-140°	590.2	7.4
140°-150°	537.9	6.8
150°-160°	430.7	5.4
160°-170°	277.9	3.5
170°-180°	95.8	1.2
0°-30°	1113.0	14.0
0°-40°	1811.3	22.8
0°-60°	3227.4	40.7
0°-90°	4455.1	56.2
90°-120°	969.1	12.2
90°-150°	2674.6	33.7
90°-180°	3479.0	43.8
0°-180°	7934.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1446	1446	1446	1446	1446	
5°	1448	1444	1435	1448	1446	137
15°	1378	1383	1382	1397	1396	388
25°	1244	1260	1265	1285	1285	574
35°	1071	1096	1117	1140	1147	670
45°	876	914	953	983	996	675
55°	668	720	777	819	832	598
65°	462	523	592	640	655	456
75°	250	324	403	455	474	268
85°	77	156	239	293	309	79
90°	21	106	196	253	270	17
95°	63	94	179	233	249	68
105°	236	282	282	194	209	249
115°	426	450	513	558	574	422
125°	595	601	649	684	696	532
135°	738	740	761	792	797	568
145°	849	853	854	868	875	531
155°	934	932	933	937	932	430
165°	984	982	982	988	982	278
175°	1008	1004	1005	1010	1004	96
180°	1008	1008	1008	1008	1008	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1446.1	1446.1	1446.1	1446.1	1446.1
2.5°	1454.0	1449.2	1436.6	1449.2	1447.7
5°	1447.7	1444.5	1435.1	1447.7	1446.1
7.5°	1436.6	1436.6	1427.2	1442.9	1441.4
10°	1420.9	1424.0	1416.2	1431.9	1428.8
12.5°	1402.0	1406.7	1402.0	1416.2	1413.0
15°	1378.4	1383.1	1381.5	1397.3	1395.7
17.5°	1350.0	1359.5	1357.9	1372.1	1368.9
20°	1318.5	1327.9	1331.1	1345.3	1346.8
22.5°	1285.4	1294.9	1299.6	1318.5	1316.9
25°	1244.5	1260.2	1264.9	1285.4	1285.4
27.5°	1205.1	1222.4	1231.9	1249.2	1250.8
30°	1162.5	1183.0	1195.6	1214.5	1214.5
32.5°	1115.3	1138.9	1156.2	1176.7	1181.4
35°	1071.2	1096.4	1116.9	1140.5	1146.8
37.5°	1023.9	1052.3	1075.9	1102.7	1107.4
40°	976.7	1005.0	1036.5	1063.3	1069.6
42.5°	924.7	960.9	994.0	1023.9	1033.4
45°	875.8	913.7	953.0	983.0	995.6
47.5°	823.9	866.4	910.5	943.6	953.0
50°	773.5	817.6	866.4	902.6	913.7
52.5°	719.9	767.2	822.3	860.1	874.3
55°	667.9	719.9	776.6	819.1	831.7
57.5°	617.5	671.1	732.5	775.0	789.2
60°	563.9	620.7	685.2	729.3	746.7
62.5°	513.5	571.8	641.1	685.2	701.0
65°	461.6	523.0	592.3	639.6	655.3
67.5°	409.6	474.2	543.5	595.4	608.1
70°	354.4	422.2	497.8	548.2	563.9
72.5°	304.0	371.8	450.5	502.5	518.3
75°	250.5	324.5	403.3	455.3	474.2
77.5°	204.8	278.8	357.6	412.7	426.9
80°	156.0	233.1	315.1	368.6	384.4
82.5°	113.4	192.2	275.7	329.2	345.0
85°	77.2	156.0	239.4	293.0	308.8
87.5°	47.3	126.0	206.4	259.9	275.7
90°	21.2	105.9	196.0	252.6	269.8
92.5°	36.1	99.3	184.9	242.1	257.1
95°	63.0	93.8	179.2	233.2	248.9
97.5°	98.9	134.6	170.5	223.7	240.2
100°	140.7	206.1	161.7	213.4	229.9
102.5°	188.5	242.4	183.0	202.4	219.7
105°	235.7	281.7	282.1	193.7	209.3
107.5°	284.3	324.1	399.9	327.1	243.3
110°	332.9	367.2	438.4	454.7	360.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	380.8	408.1	476.2	522.2	534.9
115°	426.4	449.8	513.2	558.5	574.1
117.5°	472.8	490.6	547.9	591.7	605.0
120°	513.9	528.5	582.8	625.0	636.0
122.5°	557.3	565.7	617.5	655.9	667.7
125°	594.6	600.6	649.3	683.9	696.4
127.5°	633.6	638.1	681.1	714.8	724.4
130°	669.5	674.0	708.5	741.4	749.3
132.5°	702.4	708.4	734.3	765.6	774.4
135°	737.6	740.5	760.8	791.5	797.0
137.5°	767.6	772.0	784.5	813.4	819.8
140°	795.9	800.4	807.4	833.9	840.3
142.5°	823.6	826.5	828.8	851.5	857.2
145°	849.1	852.7	854.2	868.3	874.6
147.5°	872.2	875.9	877.4	883.6	886.2
150°	894.6	896.9	898.4	899.9	900.8
152.5°	914.8	915.6	916.3	919.3	915.6
155°	933.6	932.1	932.8	936.6	932.1
157.5°	948.5	948.5	947.8	952.3	946.3
160°	962.0	961.3	960.5	965.0	959.8
162.5°	974.7	972.5	971.7	977.0	972.5
165°	984.5	982.2	981.5	987.5	982.2
167.5°	992.7	989.7	989.7	995.7	989.7
170°	999.4	996.4	996.4	1002.4	996.4
172.5°	1003.9	1000.2	1000.9	1006.9	1000.2
175°	1007.7	1003.9	1004.7	1009.9	1003.9
177.5°	1009.2	1005.4	1006.2	1012.2	1004.7
180°	1007.7	1007.7	1007.7	1007.7	1007.7

(END OF REPORT)