

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: P1031400

Luminaire Tested: S123DIW-B1000D755UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031400
REPORT IS A COMBINATION OF REPORTS P990837 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D755UB40-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

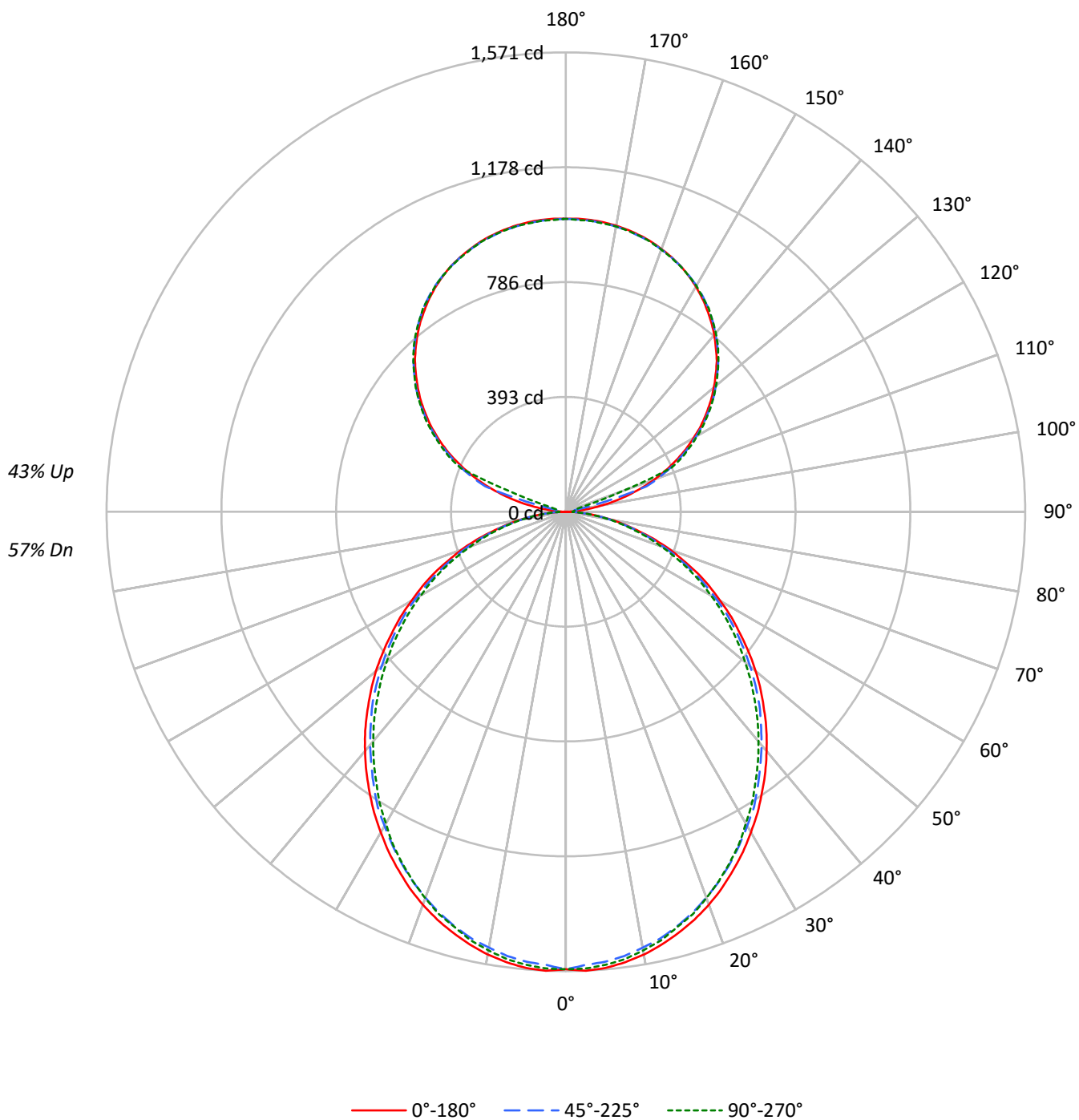
Lumens per Lamp: N/A
Luminaire Lumens: 7128.0 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 70
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	63	63	63
1	99	95	91	87	92	89	85	82	77	74	72	65	64	62	55	54	53
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	49	46	44
3	82	73	65	59	76	68	61	56	59	54	50	51	47	44	43	40	38
4	75	64	56	50	70	60	53	48	53	47	42	45	41	37	38	35	33
5	69	57	49	43	64	54	46	41	47	41	37	41	36	32	35	31	28
6	64	52	43	37	59	48	41	36	42	36	32	37	32	28	31	28	25
7	59	47	39	33	55	44	36	31	38	33	28	33	29	25	29	25	22
8	55	42	34	29	51	40	33	28	35	29	25	31	26	22	26	23	20
9	51	39	31	26	48	36	30	25	32	26	22	28	24	20	24	21	18
10	48	36	28	23	44	34	27	22	30	24	20	26	22	18	23	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16841	16841	16841
5°	16884	16260	16236
10°	16733	15710	15549
15°	16500	15138	14799
20°	16234	14502	14058
25°	15889	13832	13264
30°	15511	13138	12430
35°	15115	12429	11601
40°	14701	11685	10784
45°	14245	10959	9933
50°	13783	10151	9078
55°	13187	9310	8211
60°	12575	8380	7288
65°	12000	7375	6326
70°	11173	6261	5204
75°	9978	4958	4041
80°	8616	3484	2858
85°	6724	1874	1432

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14245 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.5	2.1
10°-20°	416.5	5.8
20°-30°	615.1	8.6
30°-40°	718.4	10.1
40°-50°	722.2	10.1
50°-60°	634.4	8.9
60°-70°	472.5	6.6
70°-80°	268.9	3.8
80°-90°	78.5	1.1
90°-100°	35.3	0.5
100°-110°	170.8	2.4
110°-120°	418.5	5.9
120°-130°	531.3	7.5
130°-140°	567.6	8.0
140°-150°	530.8	7.4
150°-160°	428.1	6.0
160°-170°	276.3	3.9
170°-180°	95.2	1.3
0°-30°	1179.1	16.5
0°-40°	1897.5	26.6
0°-60°	3254.2	45.7
0°-90°	4074.0	57.2
90°-120°	624.7	8.8
90°-150°	2254.4	31.6
90°-180°	3054.0	42.8
0°-180°	7128.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1565	1565	1565	1565	1565	
5°	1566	1559	1544	1558	1555	149
15°	1491	1485	1468	1478	1470	420
25°	1353	1345	1328	1329	1325	623
35°	1170	1162	1145	1137	1130	732
45°	959	954	936	920	914	741
55°	728	726	709	694	688	652
65°	496	490	476	466	461	490
75°	262	257	253	246	242	280
85°	70	67	67	65	65	75
90°	1	8	18	21	22	7
95°	45	15	23	28	28	54
105°	222	230	163	31	33	235
115°	416	420	427	435	438	411
125°	586	592	595	597	598	524
135°	730	735	738	740	738	562
145°	842	848	849	851	851	527
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°	1564.6	1564.6	1564.6	1564.6	1564.6
2.5°	1571.3	1566.0	1551.2	1564.6	1563.3
5°	1566.0	1559.2	1544.4	1557.9	1555.2
7.5°	1553.9	1547.1	1532.3	1544.4	1543.1
10°	1537.7	1531.0	1513.5	1525.6	1522.9
12.5°	1516.2	1510.8	1494.7	1502.7	1501.4
15°	1490.6	1485.2	1467.8	1478.5	1470.4
17.5°	1462.4	1455.6	1438.2	1446.2	1443.5
20°	1430.1	1422.0	1404.5	1409.9	1405.9
22.5°	1393.8	1385.7	1368.2	1372.2	1366.9
25°	1353.4	1345.3	1327.8	1329.2	1325.1
27.5°	1311.7	1303.6	1284.8	1286.1	1282.1
30°	1266.0	1259.2	1240.4	1240.4	1231.0
32.5°	1220.2	1210.8	1197.3	1187.9	1183.9
35°	1170.4	1162.4	1144.9	1136.8	1130.1
37.5°	1120.7	1109.9	1092.4	1083.0	1079.0
40°	1068.2	1060.1	1041.3	1030.5	1025.1
42.5°	1015.7	1006.3	987.5	976.7	971.3
45°	959.2	953.8	936.3	920.2	913.5
47.5°	904.1	896.0	879.8	863.7	858.3
50°	847.6	840.8	823.3	808.5	800.5
52.5°	788.4	784.3	765.5	753.4	745.3
55°	727.8	726.5	709.0	694.2	687.5
57.5°	671.3	665.9	652.5	639.0	631.0
60°	609.4	608.1	591.9	579.8	573.1
62.5°	554.3	550.2	534.1	522.0	518.0
65°	496.4	489.7	476.2	465.5	461.4
67.5°	434.5	429.2	418.4	409.0	403.6
70°	379.4	371.3	363.2	353.8	347.1
72.5°	321.5	316.2	306.7	298.7	296.0
75°	262.3	257.0	252.9	246.2	242.2
77.5°	209.9	207.2	201.8	196.4	196.4
80°	158.7	154.7	152.0	150.7	150.7
82.5°	109.0	109.0	109.0	106.3	104.9
85°	70.0	67.3	67.3	64.6	64.6
87.5°	35.0	30.9	29.6	28.3	28.3
90°	0.7	8.2	17.9	20.8	22.3
92.5°	17.1	12.7	19.4	24.6	25.3
95°	45.4	14.9	23.1	28.3	28.3
97.5°	82.6	61.8	23.8	29.8	30.5
100°	125.8	140.7	24.6	30.5	31.3
102.5°	174.9	184.6	55.1	30.5	32.0
105°	221.8	230.0	163.0	31.3	32.7
107.5°	271.7	278.4	289.5	174.9	77.4
110°	321.5	327.5	335.7	311.1	204.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	369.2	374.4	382.6	389.2	387.8
115°	416.0	420.5	427.2	434.6	437.6
117.5°	462.2	467.4	471.1	477.1	477.8
120°	504.6	511.3	513.5	519.5	519.5
122.5°	547.8	553.0	556.0	559.7	560.4
125°	586.5	592.4	595.4	596.9	598.4
127.5°	625.2	631.1	634.9	637.1	635.6
130°	660.9	666.9	669.8	672.8	671.3
132.5°	695.1	701.1	703.3	706.3	704.1
135°	730.1	734.6	737.6	739.8	737.6
137.5°	759.9	765.8	767.3	771.1	769.6
140°	789.7	794.1	796.4	799.3	797.8
142.5°	817.2	821.7	823.9	826.1	823.9
145°	842.5	847.7	849.2	850.7	850.7
147.5°	867.1	870.8	872.3	873.8	870.0
150°	889.4	891.6	893.1	894.6	892.4
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)