

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: P1031401

Luminaire Tested: S123DIW-B1000D755UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031401
REPORT IS A COMBINATION OF REPORTS P990838 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-F1
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

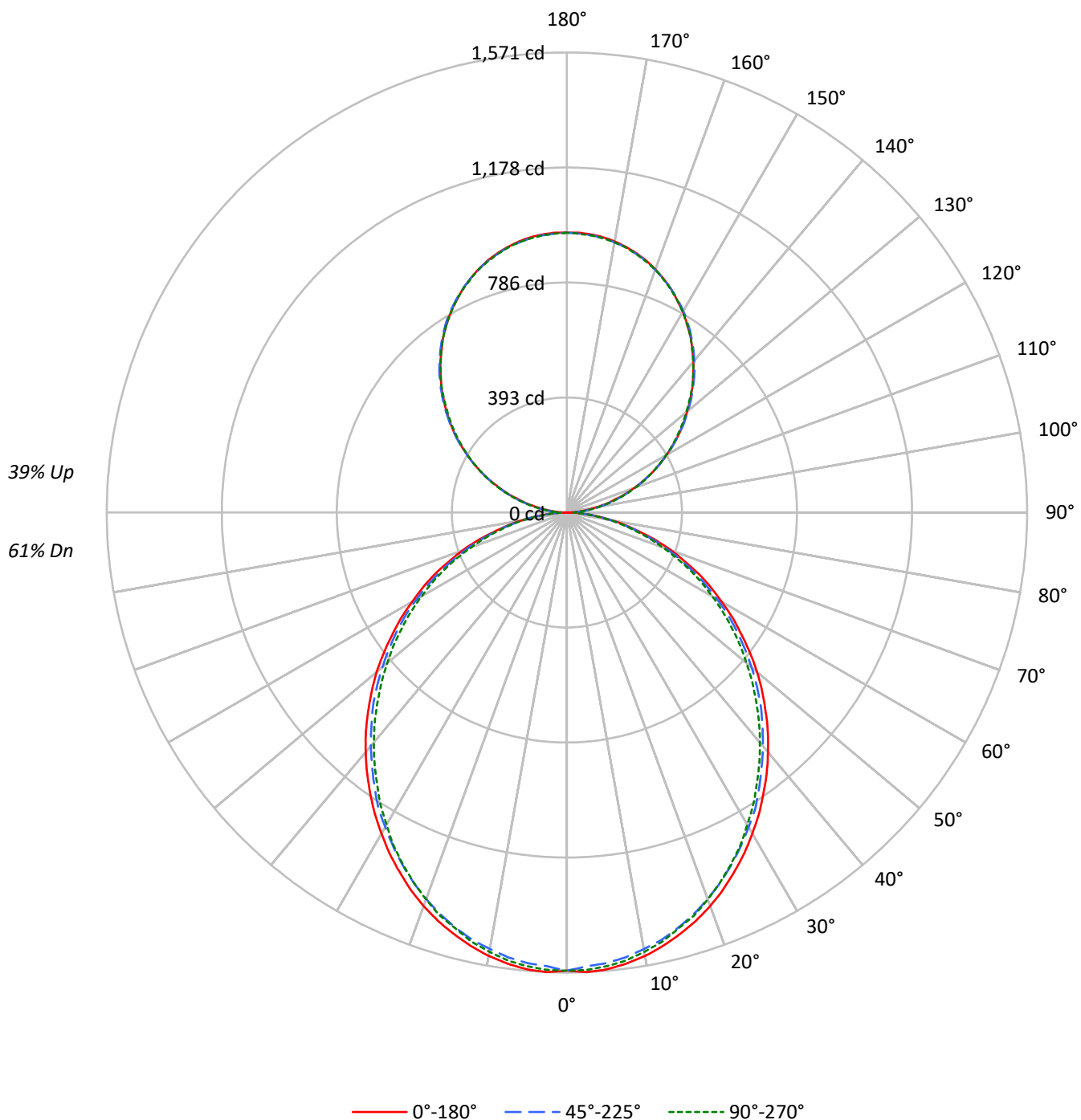
Lumens per Lamp: N/A
Luminaire Lumens: 6722.0 lumens
Efficiency: N/A
Efficacy: 96.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66
1	100	96	92	88	93	90	86	83	78	76	73	68	66	64	58	57	56
2	91	84	77	72	85	78	73	68	69	64	61	59	56	53	51	49	47
3	83	73	66	60	77	69	62	57	60	55	51	53	49	45	45	42	40
4	76	65	57	51	71	61	54	48	54	48	43	47	42	39	40	37	34
5	70	58	50	44	65	55	47	41	48	42	38	42	37	34	36	33	30
6	64	52	44	38	60	49	42	36	43	37	33	38	33	29	33	29	26
7	60	47	39	33	56	44	37	32	39	33	29	35	30	26	30	26	23
8	55	43	35	29	52	40	33	28	36	30	26	32	27	23	28	24	21
9	52	39	31	26	48	37	30	25	33	27	23	29	24	21	26	22	19
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	24	20	17

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	2.2
10°-20°	416.5	6.2
20°-30°	615.1	9.2
30°-40°	718.4	10.7
40°-50°	722.2	10.7
50°-60°	634.4	9.4
60°-70°	472.5	7.0
70°-80°	268.9	4.0
80°-90°	78.5	1.2
90°-100°	61.5	0.9
100°-110°	186.2	2.8
110°-120°	317.0	4.7
120°-130°	417.0	6.2
130°-140°	468.7	7.0
140°-150°	460.8	6.9
150°-160°	388.0	5.8
160°-170°	258.3	3.8
170°-180°	90.4	1.3
0°-30°	1179.1	17.5
0°-40°	1897.5	28.2
0°-60°	3254.2	48.4
0°-90°	4074.0	60.6
90°-120°	564.7	8.4
90°-150°	1911.3	28.4
90°-180°	2648.0	39.4
0°-180°	6722.0	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	8
95°	44	50	56	59	59	49
105°	169	170	177	177	179	181
115°	319	321	320	321	320	316
125°	467	469	468	465	462	416
135°	606	610	610	607	605	467
145°	735	736	739	738	735	459
155°	842	842	842	845	840	387
165°	917	914	914	919	914	259
175°	953	950	950	955	950	91
180°	956	956	956	956	956	

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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°	0.8	8.3	18.0	21.0	22.5
92.5°	22.5	27.0	31.5	33.8	32.3
95°	44.3	49.5	55.6	58.6	58.6
97.5°	72.8	76.6	81.1	84.8	84.1
100°	102.1	106.6	110.4	112.6	114.1
102.5°	135.9	138.1	143.4	145.6	144.9
105°	168.9	170.4	177.2	177.2	178.7
107.5°	207.9	208.7	211.7	214.0	213.2
110°	244.0	245.5	247.0	250.0	248.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281.5	282.3	282.3	286.0	286.0
115°	319.1	321.3	319.8	320.6	319.8
117.5°	357.3	358.1	356.6	356.6	354.3
120°	392.6	397.1	393.4	392.6	391.1
122.5°	429.4	432.4	430.9	428.7	426.4
125°	466.9	469.2	467.7	464.7	461.7
127.5°	501.5	506.0	504.5	500.0	497.0
130°	536.0	542.0	539.8	536.8	531.5
132.5°	570.5	576.6	575.1	571.3	567.5
135°	605.8	610.3	609.6	606.6	605.1
137.5°	638.1	641.9	644.1	640.4	638.1
140°	671.9	675.6	676.4	675.6	670.4
142.5°	702.7	706.4	707.9	707.2	703.4
145°	735.0	736.5	738.7	738.0	735.0
147.5°	762.7	765.7	768.0	768.0	763.5
150°	792.0	793.5	795.0	795.0	790.5
152.5°	816.0	818.3	819.0	820.5	816.8
155°	841.6	841.6	842.3	845.3	840.1
157.5°	863.3	862.6	863.3	866.3	861.8
160°	883.6	882.1	882.1	885.8	882.8
162.5°	901.6	899.4	900.1	903.9	898.6
165°	916.6	914.4	914.4	918.9	913.6
167.5°	929.4	926.4	927.1	931.6	927.1
170°	939.9	936.9	936.9	942.2	936.9
172.5°	948.2	945.2	945.2	949.7	944.4
175°	953.4	950.4	950.4	954.9	949.7
177.5°	956.4	953.4	953.4	957.9	952.7
180°	955.7	955.7	955.7	955.7	955.7

(END OF REPORT)