

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: P1031543

Luminaire Tested: S123DIW-B1165D755UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031543
REPORT IS A COMBINATION OF REPORTS P991165 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D755UB40-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

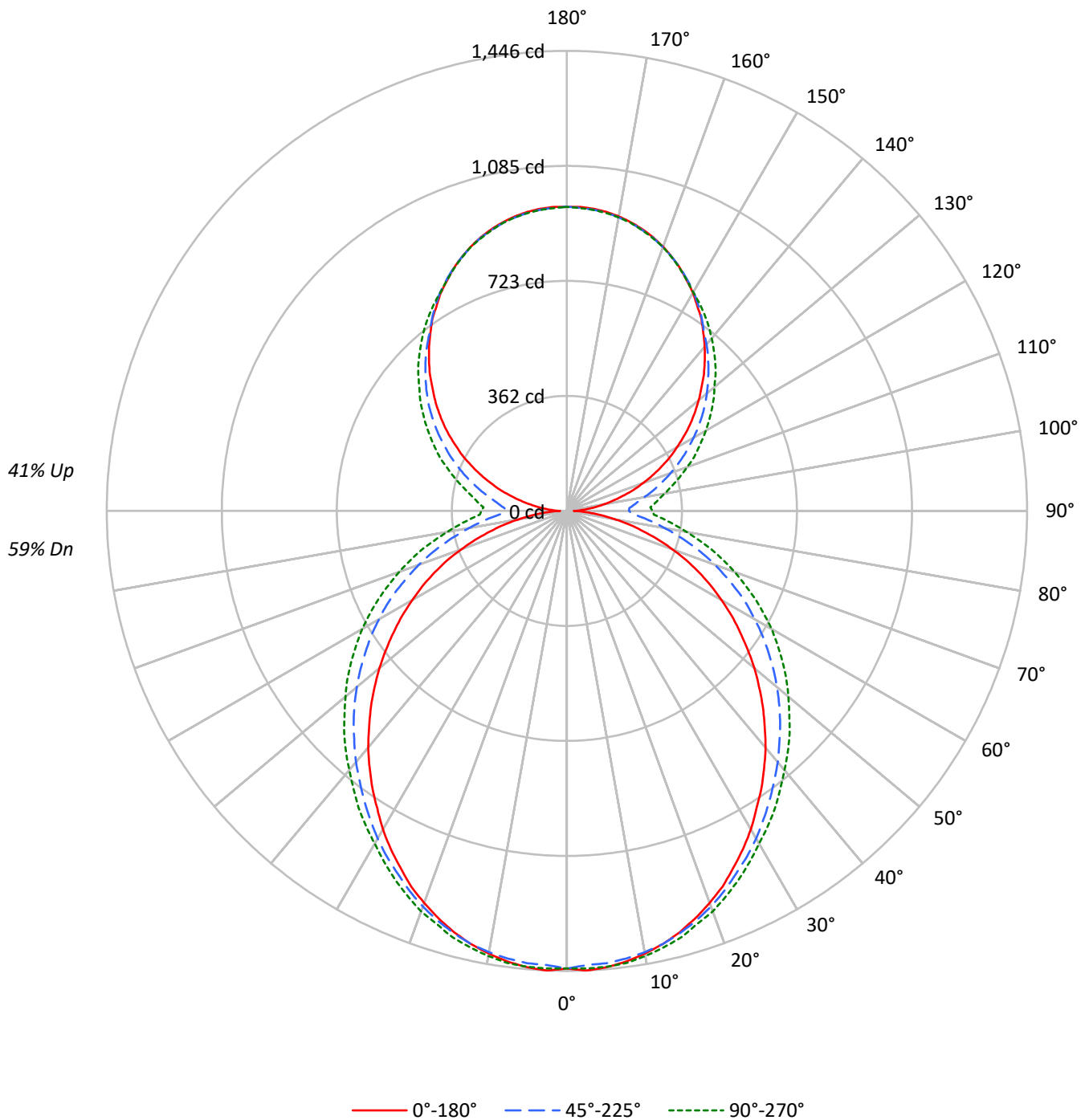
Lumens per Lamp: N/A
Luminaire Lumens: 7483.0 lumens
Efficiency: N/A
Efficacy: 88.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	102	102	102	102	88	88	88	76	76	76	65	65	65
1	99	94	89	85	92	87	84	80	76	73	70	65	63	61	55	54	52
2	89	81	74	69	83	76	70	65	66	61	57	56	53	50	48	45	43
3	81	71	63	57	75	66	59	54	58	52	47	49	45	42	42	39	36
4	74	63	54	48	69	59	51	45	51	45	40	44	39	35	37	34	31
5	68	56	47	41	63	52	44	39	45	39	34	39	34	30	33	30	27
6	63	50	41	35	58	47	39	33	41	35	30	35	30	27	30	26	23
7	58	45	37	31	54	42	35	29	37	31	26	32	27	23	28	24	21
8	54	41	33	27	50	38	31	26	34	28	23	29	24	21	25	21	18
9	50	37	29	24	47	35	28	23	31	25	21	27	22	19	23	19	17
10	47	34	27	22	44	32	25	21	29	23	19	25	20	17	22	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15480	15480	15480
5°	15521	15025	15013
10°	15376	14618	14506
15°	15173	14168	13969
20°	14884	13668	13393
25°	14528	13103	12795
30°	14165	12593	12195
35°	13756	12058	11706
40°	13366	11567	11190
45°	12935	11093	10764
50°	12508	10623	10303
55°	12035	10141	9878
60°	11572	9647	9442
65°	11096	9122	8934
70°	10381	8533	8408
75°	9476	7861	7866
80°	8420	7181	7248
85°	7377	6630	6805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12935 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.4	1.8
10°-20°	388.9	5.2
20°-30°	581.6	7.8
30°-40°	694.4	9.3
40°-50°	726.5	9.7
50°-60°	681.7	9.1
60°-70°	569.4	7.6
70°-80°	407.2	5.4
80°-90°	244.3	3.3
90°-100°	213.8	2.9
100°-110°	298.1	4.0
110°-120°	391.7	5.2
120°-130°	459.7	6.1
130°-140°	487.9	6.5
140°-150°	464.8	6.2
150°-160°	388.0	5.2
160°-170°	258.3	3.5
170°-180°	90.4	1.2
0°-30°	1106.9	14.8
0°-40°	1801.2	24.1
0°-60°	3209.4	42.9
0°-90°	4430.3	59.2
90°-120°	903.6	12.1
90°-150°	2315.9	30.9
90°-180°	3053.0	40.8
0°-180°	7483.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1438	1438	1438	1438	1438	
5°	1440	1436	1427	1440	1438	137
15°	1371	1375	1374	1390	1388	386
25°	1238	1253	1258	1278	1278	570
35°	1065	1090	1111	1134	1140	666
45°	871	909	948	978	990	672
55°	664	716	772	815	827	595
65°	459	520	589	636	652	454
75°	249	323	401	453	472	266
85°	77	155	238	291	307	79
90°	21	105	195	251	268	18
95°	62	128	211	262	278	62
105°	181	220	295	339	354	193
115°	327	348	403	441	453	324
125°	472	474	518	548	556	421
135°	609	612	628	654	660	469
145°	737	736	739	750	754	460
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°	1438.1	1438.1	1438.1	1438.1	1438.1
2.5°	1445.9	1441.2	1428.7	1441.2	1439.6
5°	1439.6	1436.5	1427.1	1439.6	1438.1
7.5°	1428.7	1428.7	1419.3	1434.9	1433.4
10°	1413.0	1416.1	1408.3	1424.0	1420.8
12.5°	1394.2	1398.9	1394.2	1408.3	1405.2
15°	1370.7	1375.4	1373.8	1389.5	1387.9
17.5°	1342.5	1351.9	1350.3	1364.4	1361.3
20°	1311.2	1320.6	1323.7	1337.8	1339.4
22.5°	1278.3	1287.7	1292.4	1311.2	1309.6
25°	1237.5	1253.2	1257.9	1278.3	1278.3
27.5°	1198.4	1215.6	1225.0	1242.2	1243.8
30°	1156.1	1176.5	1189.0	1207.8	1207.8
32.5°	1109.1	1132.6	1149.8	1170.2	1174.9
35°	1065.2	1090.3	1110.7	1134.2	1140.4
37.5°	1018.2	1046.4	1069.9	1096.6	1101.3
40°	971.2	999.4	1030.8	1057.4	1063.7
42.5°	919.5	955.6	988.5	1018.2	1027.6
45°	871.0	908.6	947.7	977.5	990.0
47.5°	819.3	861.6	905.4	938.3	947.7
50°	769.2	813.0	861.6	897.6	908.6
52.5°	715.9	762.9	817.7	855.3	869.4
55°	664.2	715.9	772.3	814.6	827.1
57.5°	614.1	667.3	728.4	770.7	784.8
60°	560.8	617.2	681.4	725.3	742.5
62.5°	510.7	568.6	637.6	681.4	697.1
65°	459.0	520.1	589.0	636.0	651.7
67.5°	407.3	471.5	540.4	592.1	604.7
70°	352.5	419.8	495.0	545.1	560.8
72.5°	302.3	369.7	448.0	499.7	515.4
75°	249.1	322.7	401.0	452.7	471.5
77.5°	203.6	277.3	355.6	410.4	424.5
80°	155.1	231.8	313.3	366.6	382.2
82.5°	112.8	191.1	274.1	327.4	343.1
85°	76.8	155.1	238.1	291.4	307.0
87.5°	47.0	125.3	205.2	258.5	274.1
90°	21.2	105.4	195.0	251.3	268.4
92.5°	41.3	113.2	196.0	250.0	262.6
95°	61.5	127.8	210.7	262.2	277.9
97.5°	88.5	148.7	226.8	277.5	292.4
100°	116.2	170.8	246.7	294.3	311.5
102.5°	148.4	194.5	270.3	316.3	331.3
105°	181.4	220.5	294.7	338.6	354.1
107.5°	218.9	252.6	319.8	364.4	377.7
110°	253.4	283.1	347.3	391.0	402.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	290.9	313.6	373.2	416.0	430.1
115°	326.9	347.9	402.8	441.2	453.0
117.5°	365.1	378.5	430.2	467.8	478.1
120°	398.9	411.2	459.2	494.4	503.9
122.5°	435.7	441.8	488.9	521.1	529.8
125°	471.6	473.9	517.8	547.7	555.7
127.5°	506.2	509.1	546.8	573.6	581.6
130°	540.7	545.1	574.3	601.0	605.1
132.5°	573.6	579.7	601.7	626.1	633.3
135°	608.9	611.9	628.4	653.6	659.9
137.5°	641.2	643.5	656.6	678.0	683.5
140°	673.5	677.2	682.7	705.4	708.0
142.5°	704.3	706.4	707.9	727.6	731.6
145°	736.6	736.5	738.7	750.5	753.8
147.5°	762.7	765.7	768.0	772.7	774.5
150°	792.0	793.5	795.0	795.0	793.6
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)