

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: P1031916

Luminaire Tested: S123DIW-B775D1535UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031916
REPORT IS A COMBINATION OF REPORTS P992023 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1535UB40-4F0-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

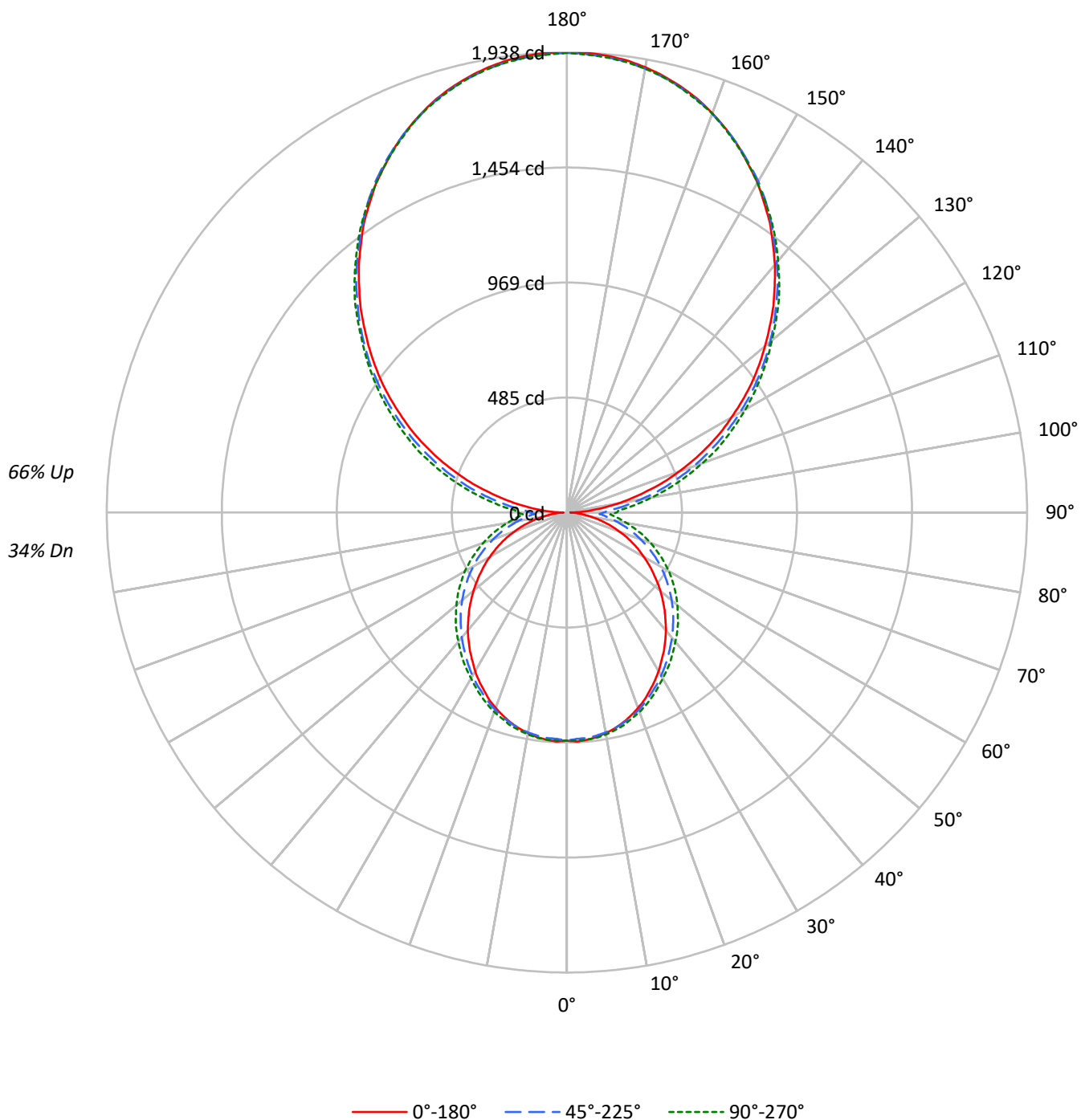
Lumens per Lamp: N/A
Luminaire Lumens: 8599.0 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 88.1
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	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42
1	94	89	85	81	84	80	77	74	64	62	60	49	48	46	36	35	34
2	85	77	71	66	76	70	64	60	56	52	49	43	40	38	31	29	28
3	77	68	60	54	69	61	55	50	49	44	41	38	35	32	27	25	23
4	70	60	52	46	63	54	47	42	43	38	34	33	30	27	24	22	20
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15
7	55	43	35	29	49	39	32	27	31	26	22	24	21	18	18	15	13
8	51	38	31	26	46	35	28	24	28	23	20	22	18	16	16	14	12
9	47	35	28	23	42	32	25	21	26	21	17	20	17	14	15	13	11
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	11	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10342	10342	10342
5°	10370	10039	10030
10°	10273	9766	9692
15°	10137	9466	9333
20°	9944	9132	8948
25°	9706	8754	8548
30°	9464	8414	8147
35°	9191	8055	7821
40°	8931	7728	7476
45°	8642	7412	7193
50°	8357	7097	6883
55°	8041	6775	6600
60°	7732	6446	6309
65°	7414	6095	5969
70°	6935	5701	5618
75°	6330	5252	5255
80°	5624	4797	4844
85°	4928	4431	4546

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8642 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.1	1.1
10°-20°	259.8	3.0
20°-30°	388.5	4.5
30°-40°	463.9	5.4
40°-50°	485.4	5.6
50°-60°	455.5	5.3
60°-70°	380.5	4.4
70°-80°	272.0	3.2
80°-90°	166.0	1.9
90°-100°	226.4	2.6
100°-110°	452.1	5.3
110°-120°	692.3	8.1
120°-130°	873.5	10.2
130°-140°	962.6	11.2
140°-150°	936.5	10.9
150°-160°	786.2	9.1
160°-170°	523.4	6.1
170°-180°	183.3	2.1
0°-30°	739.5	8.6
0°-40°	1203.4	14.0
0°-60°	2144.3	24.9
0°-90°	2962.7	34.5
90°-120°	1370.8	15.9
90°-150°	4143.4	48.2
90°-180°	5636.0	65.5
0°-180°	8599.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	961	961	961	961	961	
5°	962	960	954	962	961	91
15°	916	919	918	928	927	258
25°	827	837	840	854	854	381
35°	712	728	742	758	762	445
45°	582	607	633	653	662	449
55°	444	478	516	544	553	397
65°	307	348	394	425	435	303
75°	166	216	268	302	315	178
85°	51	104	159	195	205	53
90°	15	82	155	196	210	16
95°	101	153	216	255	265	108
105°	351	379	438	467	479	375
115°	652	669	704	730	737	645
125°	949	954	981	997	998	847
135°	1230	1238	1248	1261	1263	948
145°	1490	1492	1497	1504	1502	931
155°	1705	1705	1707	1713	1702	785
165°	1858	1853	1853	1862	1851	524
175°	1932	1926	1926	1935	1924	184
180°	1937	1937	1937	1937	1937	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	960.8	960.8	960.8	960.8	960.8
2.5°	966.0	962.9	954.5	962.9	961.8
5°	961.8	959.7	953.5	961.8	960.8
7.5°	954.5	954.5	948.2	958.7	957.6
10°	944.0	946.1	940.9	951.4	949.3
12.5°	931.5	934.6	931.5	940.9	938.8
15°	915.8	918.9	917.9	928.3	927.3
17.5°	896.9	903.2	902.2	911.6	909.5
20°	876.0	882.3	884.4	893.8	894.9
22.5°	854.0	860.3	863.5	876.0	875.0
25°	826.8	837.3	840.4	854.0	854.0
27.5°	800.7	812.2	818.4	830.0	831.0
30°	772.4	786.0	794.4	806.9	806.9
32.5°	741.0	756.7	768.2	781.8	785.0
35°	711.7	728.4	742.0	757.7	761.9
37.5°	680.3	699.1	714.8	732.6	735.8
40°	648.9	667.7	688.7	706.5	710.6
42.5°	614.4	638.4	660.4	680.3	686.6
45°	581.9	607.0	633.2	653.1	661.5
47.5°	547.4	575.6	604.9	626.9	633.2
50°	513.9	543.2	575.6	599.7	607.0
52.5°	478.3	509.7	546.3	571.4	580.9
55°	443.8	478.3	516.0	544.2	552.6
57.5°	410.3	445.9	486.7	514.9	524.4
60°	374.7	412.4	455.3	484.6	496.1
62.5°	341.2	379.9	426.0	455.3	465.7
65°	306.7	347.5	393.5	424.9	435.4
67.5°	272.1	315.0	361.1	395.6	404.0
70°	235.5	280.5	330.7	364.2	374.7
72.5°	202.0	247.0	299.3	333.9	344.3
75°	166.4	215.6	267.9	302.5	315.0
77.5°	136.1	185.2	237.6	274.2	283.6
80°	103.6	154.9	209.3	244.9	255.4
82.5°	75.4	127.7	183.2	218.7	229.2
85°	51.3	103.6	159.1	194.7	205.1
87.5°	31.4	83.7	137.1	172.7	183.2
90°	15.1	81.6	154.8	196.5	209.9
92.5°	58.2	112.4	173.8	212.9	219.3
95°	101.3	152.7	216.2	254.8	265.2
97.5°	158.1	203.3	261.6	300.6	309.6
100°	216.3	258.9	314.7	349.6	363.1
102.5°	283.8	317.6	375.4	409.2	418.1
105°	350.7	378.8	437.5	466.8	479.3
107.5°	428.7	452.2	501.2	534.1	541.9
110°	500.7	522.6	567.5	600.8	606.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	576.8	592.9	632.7	666.5	675.9
115°	651.7	668.9	703.6	730.2	737.1
117.5°	729.3	739.2	771.8	796.9	800.7
120°	799.8	814.2	841.1	863.6	868.0
122.5°	874.4	882.6	911.9	930.3	933.2
125°	949.3	953.9	981.3	997.2	998.4
127.5°	1019.3	1027.4	1050.6	1062.4	1063.6
130°	1089.3	1100.5	1116.8	1130.6	1126.3
132.5°	1158.3	1170.4	1183.1	1194.3	1194.1
135°	1229.8	1237.8	1247.9	1260.6	1262.7
137.5°	1295.2	1301.7	1313.7	1322.7	1323.5
140°	1362.5	1370.1	1374.9	1389.0	1383.6
142.5°	1424.9	1431.5	1434.6	1446.6	1444.2
145°	1490.3	1492.4	1496.9	1503.8	1501.9
147.5°	1545.6	1551.7	1556.3	1559.4	1554.4
150°	1604.9	1608.0	1611.0	1611.0	1604.0
152.5°	1653.6	1658.2	1659.7	1662.7	1655.1
155°	1705.3	1705.3	1706.9	1713.0	1702.3
157.5°	1749.5	1747.9	1749.5	1755.5	1746.4
160°	1790.5	1787.5	1787.5	1795.1	1789.0
162.5°	1827.0	1822.5	1824.0	1831.6	1821.0
165°	1857.5	1852.9	1852.9	1862.0	1851.4
167.5°	1883.3	1877.2	1878.8	1887.9	1878.8
170°	1904.6	1898.5	1898.5	1909.2	1898.5
172.5°	1921.4	1915.3	1915.3	1924.4	1913.8
175°	1932.0	1925.9	1925.9	1935.1	1924.4
177.5°	1938.1	1932.0	1932.0	1941.1	1930.5
180°	1936.6	1936.6	1936.6	1936.6	1936.6

(END OF REPORT)