

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: P1031917

Luminaire Tested: S123DIW-B775D1535UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031917
REPORT IS A COMBINATION OF REPORTS P992026 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-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

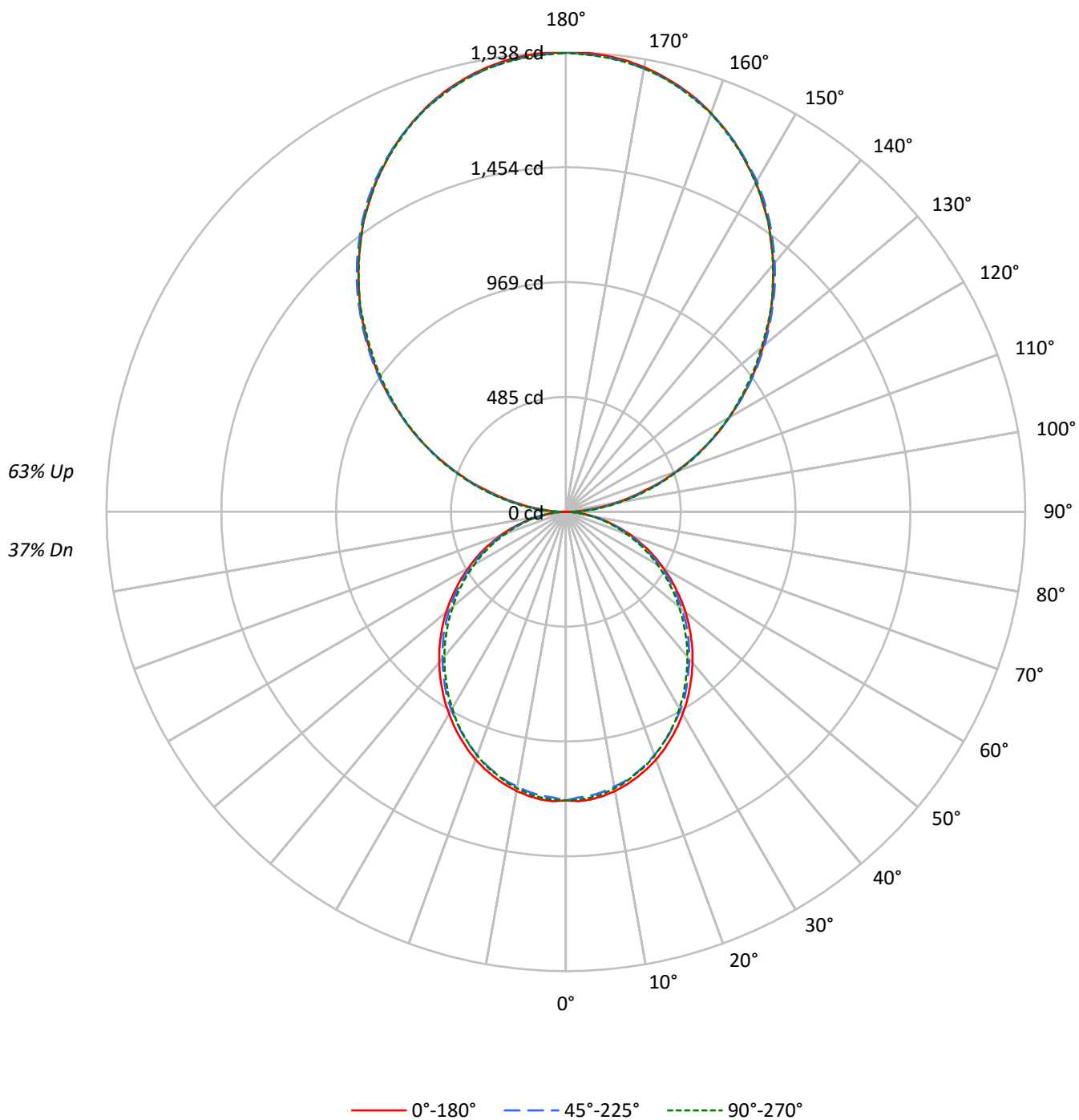
Lumens per Lamp: N/A
Luminaire Lumens: 8538.0 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	50	30	10
RCR																				
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	44	44	44	37		
1	95	91	87	83	86	82	79	76	67	64	62	52	51	49	39	38	37	31		
2	86	79	73	68	78	72	67	62	58	55	52	46	43	41	34	33	31	26		
3	79	69	62	57	71	63	57	52	51	47	43	41	37	35	30	28	27	22		
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	27	25	23	19		
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	24	22	20	16		
6	61	49	41	35	55	45	38	33	37	31	27	29	25	22	22	20	18	14		
7	56	44	36	31	51	40	33	29	33	28	24	26	23	20	20	18	16	13		
8	52	40	32	27	47	37	30	25	30	25	21	24	20	18	19	16	14	11		
9	48	36	29	24	44	33	27	22	28	23	19	22	18	16	17	14	13	10		
10	45	33	26	21	41	31	24	20	25	20	17	20	17	14	16	13	11	9		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13103	13103	13103
5°	13135	12651	12631
10°	13018	12222	12097
15°	12837	11777	11514
20°	12630	11282	10937
25°	12361	10762	10320
30°	12067	10221	9670
35°	11760	9669	9025
40°	11437	9091	8391
45°	11083	8527	7728
50°	10723	7898	7063
55°	10259	7243	6387
60°	9783	6520	5671
65°	9336	5738	4922
70°	8693	4872	4048
75°	7764	3858	3143
80°	6705	2712	2223
85°	5225	1456	1113

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11083 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	1.3
10°-20°	324.0	3.8
20°-30°	478.6	5.6
30°-40°	558.9	6.5
40°-50°	561.9	6.6
50°-60°	493.6	5.8
60°-70°	367.6	4.3
70°-80°	209.2	2.5
80°-90°	63.6	0.7
90°-100°	124.7	1.5
100°-110°	377.3	4.4
110°-120°	642.3	7.5
120°-130°	845.1	9.9
130°-140°	949.9	11.1
140°-150°	933.8	10.9
150°-160°	786.2	9.2
160°-170°	523.4	6.1
170°-180°	183.3	2.1
0°-30°	917.4	10.7
0°-40°	1476.3	17.3
0°-60°	2531.7	29.7
0°-90°	3172.1	37.2
90°-120°	1144.3	13.4
90°-150°	3873.1	45.4
90°-180°	5366.0	62.8
0°-180°	8538.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1218	1213	1202	1212	1210	116
15°	1160	1156	1142	1150	1144	327
25°	1053	1047	1033	1034	1031	485
35°	911	904	891	884	879	570
45°	746	742	728	716	711	576
55°	566	565	552	540	535	507
65°	386	381	370	362	359	381
75°	204	200	197	192	188	218
85°	54	52	52	50	50	58
90°	2	17	36	43	46	10
95°	90	100	113	119	119	99
105°	342	345	359	359	362	366
115°	646	651	648	650	648	640
125°	946	951	948	942	936	844
135°	1228	1237	1235	1229	1226	946
145°	1489	1492	1497	1495	1489	930
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°	1217.3	1217.3	1217.3	1217.3	1217.3
2.5°	1222.5	1218.3	1206.8	1217.3	1216.2
5°	1218.3	1213.1	1201.6	1212.0	1209.9
7.5°	1208.9	1203.7	1192.1	1201.6	1200.5
10°	1196.3	1191.1	1177.5	1186.9	1184.8
12.5°	1179.6	1175.4	1162.8	1169.1	1168.1
15°	1159.7	1155.5	1141.9	1150.3	1144.0
17.5°	1137.7	1132.5	1118.9	1125.2	1123.1
20°	1112.6	1106.3	1092.7	1096.9	1093.8
22.5°	1084.3	1078.1	1064.5	1067.6	1063.4
25°	1052.9	1046.7	1033.1	1034.1	1031.0
27.5°	1020.5	1014.2	999.6	1000.6	997.5
30°	984.9	979.7	965.0	965.0	957.7
32.5°	949.3	942.0	931.5	924.2	921.1
35°	910.6	904.3	890.7	884.4	879.2
37.5°	871.9	863.5	849.9	842.6	839.4
40°	831.0	824.8	810.1	801.7	797.6
42.5°	790.2	782.9	768.2	759.9	755.7
45°	746.3	742.1	728.5	715.9	710.7
47.5°	703.4	697.1	684.5	672.0	667.8
50°	659.4	654.2	640.6	629.0	622.8
52.5°	613.3	610.2	595.5	586.1	579.8
55°	566.2	565.2	551.6	540.1	534.8
57.5°	522.3	518.1	507.6	497.2	490.9
60°	474.1	473.1	460.5	451.1	445.9
62.5°	431.2	428.1	415.5	406.1	403.0
65°	386.2	381.0	370.5	362.1	359.0
67.5°	338.1	333.9	325.5	318.2	314.0
70°	295.2	288.9	282.6	275.3	270.0
72.5°	250.2	246.0	238.6	232.4	230.3
75°	204.1	199.9	196.8	191.5	188.4
77.5°	163.3	161.2	157.0	152.8	152.8
80°	123.5	120.4	118.3	117.2	117.2
82.5°	84.8	84.8	84.8	82.7	81.6
85°	54.4	52.3	52.3	50.2	50.2
87.5°	27.2	24.1	23.0	22.0	22.0
90°	1.5	16.7	36.5	42.6	45.6
92.5°	45.6	54.8	63.9	68.5	65.4
95°	89.8	100.4	112.6	118.7	118.7
97.5°	147.6	155.2	164.3	171.9	170.4
100°	206.9	216.0	223.6	228.2	231.2
102.5°	275.4	279.9	290.6	295.1	293.6
105°	342.3	345.3	359.0	359.0	362.1
107.5°	421.4	422.9	429.0	433.6	432.0
110°	494.4	497.5	500.5	506.6	503.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	570.5	572.0	572.0	579.6	579.6
115°	646.5	651.1	648.1	649.6	648.1
117.5°	724.1	725.6	722.6	722.6	718.0
120°	795.6	804.8	797.1	795.6	792.6
122.5°	870.2	876.3	873.2	868.6	864.1
125°	946.2	950.8	947.8	941.7	935.6
127.5°	1016.2	1025.3	1022.3	1013.2	1007.1
130°	1086.2	1098.4	1093.8	1087.7	1077.1
132.5°	1156.2	1168.3	1165.3	1157.7	1150.1
135°	1227.7	1236.8	1235.3	1229.2	1226.1
137.5°	1293.1	1300.7	1305.3	1297.6	1293.1
140°	1361.5	1369.1	1370.7	1369.1	1358.5
142.5°	1423.9	1431.5	1434.6	1433.0	1425.4
145°	1489.3	1492.4	1496.9	1495.4	1489.3
147.5°	1545.6	1551.7	1556.3	1556.3	1547.1
150°	1604.9	1608.0	1611.0	1611.0	1601.9
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)