

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: P189482

Luminaire Tested: **ML4D09NFL935-TIR50AWW25-TL43R2GMWWB_TL44S2GMWWB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P189482
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P189448)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML4D09NFL935-TIR50AWW25-TL43R2GMWWB_TL44S2GMWWB
Description: ML4 RECESSED ASYMMETRIC ACCENT DOWNLIGHT WITH LENSED ROUND (OR SQUARE)
Light Source: CITIZEN 3500K
CLU711
Ballast/Driver: UNV-120-277 ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 697.1 lumens
Efficiency: N/A
Efficacy: 58.3 lumens/watt
Spacing Criteria (0/90/45): 1.51 / 0.58 / 0.91
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

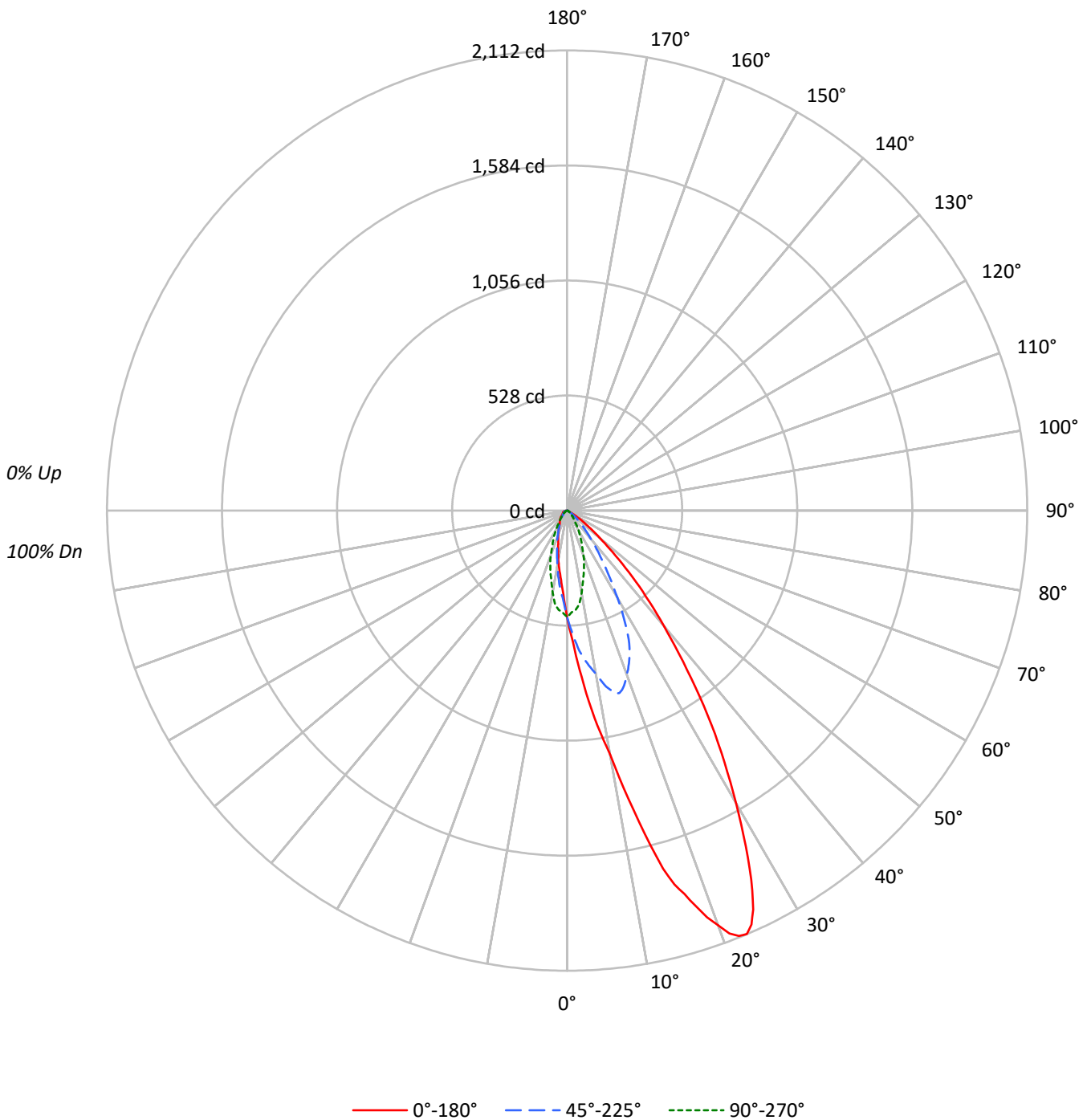
Input Watts (W): 11.95
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	109	107	104	110	107	105	102	103	101	99	99	98	96	96	95	93	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78	76
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	75	72	70
5	89	79	73	68	87	78	72	68	77	71	67	75	70	66	73	69	66	64
6	84	74	67	62	82	73	67	62	71	66	62	70	65	61	69	64	61	59
7	79	69	62	57	78	68	62	57	67	61	57	65	60	57	64	60	56	55
8	75	64	58	53	73	64	57	53	62	57	53	61	56	52	60	56	52	51
9	71	60	54	49	70	60	53	49	59	53	49	58	52	49	57	52	49	47
10	67	56	50	46	66	56	50	46	55	50	46	54	49	46	54	49	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.5	7.0
10°-20°	157.8	22.6
20°-30°	218.1	31.3
30°-40°	151.6	21.7
40°-50°	73.2	10.5
50°-60°	27.5	3.9
60°-70°	10.8	1.5
70°-80°	6.9	1.0
80°-90°	2.7	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	424.4	60.9
0°-40°	576.0	82.6
0°-60°	676.7	97.1
0°-90°	697.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	697.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	489	489	489	489	489	
5°	766	646	457	360	319	85
15°	1701	870	294	182	159	479
25°	2021	673	152	90	88	888
35°	1093	286	63	48	58	679
45°	401	102	30	28	39	316
55°	89	28	14	19	26	86
65°	7	5	7	15	20	10
75°	2	3	5	11	14	2
85°	1	1	2	4	4	1
90°	0	0	0	0	0	



TEST NUMBER: P189482

CATALOG NUMBER: ML4D09NFL935-TIR50AWW25-TL43R2GMWWB_TL44S2GMWWB

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	488.8	488.8	488.8	488.8	488.8	488.8	488.8	488.8	488.8	488.8	488.8
2.5°	602.8	606.8	612.7	609.8	594.9	601.8	599.9	606.8	600.8	602.8	591.9
5°	766.4	755.5	757.5	757.5	738.6	739.6	739.6	737.7	732.7	726.8	703.0
7.5°	959.7	944.8	932.0	938.9	931.0	916.1	897.3	890.4	883.4	859.6	845.7
10°	1137.2	1163.9	1154.0	1153.1	1144.1	1124.3	1081.7	1082.6	1061.8	1028.2	1016.2
12.5°	1406.9	1409.8	1400.0	1378.1	1355.3	1346.4	1309.7	1301.8	1259.2	1228.4	1182.8
15°	1701.4	1663.6	1662.7	1640.9	1578.3	1563.6	1534.8	1494.1	1440.5	1398.9	1309.7
16°	1784.6	1757.9	1745.9	1729.1	1671.6	1641.9	1609.2	1554.6	1499.1	1442.6	1352.3
17°	1840.2	1847.1	1821.3	1802.4	1761.8	1717.2	1672.6	1606.2	1549.7	1477.3	1393.0
18°	1907.6	1930.4	1884.8	1876.8	1848.0	1786.6	1726.1	1652.7	1593.2	1507.0	1433.6
19°	1974.0	2000.7	1948.2	1938.3	1919.4	1846.1	1767.8	1693.4	1627.0	1530.8	1466.4
20°	2025.5	2049.4	2001.8	1983.9	1970.0	1887.7	1796.5	1725.1	1651.8	1551.6	1489.2
21°	2079.1	2078.0	2044.4	2010.6	1990.8	1909.5	1816.3	1748.0	1664.6	1565.5	1500.1
22°	2105.9	2083.0	2066.2	2015.6	1980.9	1909.5	1822.3	1753.9	1662.7	1568.5	1491.1
23°	2111.8	2073.2	2065.2	2003.7	1948.2	1891.7	1814.4	1744.9	1643.8	1559.6	1463.4
24°	2079.1	2040.4	2038.5	1974.0	1899.6	1855.0	1790.6	1713.2	1609.2	1530.8	1417.8
25°	2020.6	1988.9	1982.0	1929.3	1842.1	1801.4	1745.9	1661.7	1559.6	1490.1	1361.3
26°	1939.3	1920.5	1904.5	1867.9	1777.7	1745.9	1682.5	1591.3	1497.1	1423.7	1297.8
27°	1846.1	1842.1	1825.3	1790.6	1711.3	1670.6	1607.1	1510.0	1425.8	1346.4	1232.4
28°	1745.9	1753.9	1727.1	1701.4	1636.9	1586.3	1518.9	1421.8	1346.4	1260.1	1166.0
29°	1647.8	1660.7	1627.0	1606.2	1558.6	1487.2	1425.8	1333.5	1263.1	1175.9	1098.5
30°	1550.6	1561.5	1527.9	1507.0	1470.3	1408.8	1330.5	1246.2	1178.8	1094.6	1029.1
31°	1454.4	1457.5	1419.7	1393.0	1375.2	1312.6	1235.3	1162.0	1096.5	1017.2	956.8
32°	1362.2	1353.3	1328.6	1293.9	1273.1	1217.5	1146.1	1082.6	1016.2	942.9	883.4
33°	1273.1	1254.2	1241.3	1197.7	1169.9	1125.3	1061.8	1006.3	938.9	873.4	808.0
34°	1184.8	1160.0	1154.0	1107.4	1069.8	1038.1	983.5	931.0	862.6	806.0	735.6
35°	1092.6	1069.8	1065.8	1024.2	978.6	957.8	909.1	856.6	790.2	739.6	664.2
36°	1002.4	985.5	981.5	945.8	898.2	880.4	834.8	784.3	721.8	675.1	599.9
37°	915.1	906.2	898.2	872.5	826.9	807.0	765.4	714.8	658.3	610.8	542.3
38°	832.8	832.8	819.0	801.1	762.4	738.6	698.0	648.4	598.8	550.3	490.7
39°	756.4	762.4	744.6	731.6	699.9	672.2	633.5	585.0	541.3	492.8	444.2
40°	688.1	703.0	674.2	664.2	639.4	609.8	571.1	526.4	487.8	441.2	402.5
42.5°	535.4	540.3	521.5	505.6	491.7	465.0	431.3	401.6	370.8	337.1	310.3
45°	400.6	397.6	389.6	369.9	353.9	340.1	319.3	299.4	274.6	253.8	228.1
47.5°	281.6	285.5	277.6	271.6	250.8	244.9	231.0	219.1	199.3	182.5	161.6
50°	194.3	200.2	190.3	190.3	179.4	171.6	161.6	150.7	140.8	126.9	116.0
52.5°	135.9	136.8	131.9	131.9	125.9	118.9	112.0	105.1	98.1	89.2	82.3
55°	89.2	89.2	87.2	85.3	81.3	77.3	73.3	70.4	65.5	60.5	54.6
57.5°	52.5	53.6	51.5	50.6	47.6	46.6	43.7	42.6	39.7	36.7	33.7
60°	27.7	28.8	27.7	27.7	26.7	25.8	24.8	23.8	22.8	20.8	18.9
62.5°	13.9	14.9	13.9	14.9	14.9	12.9	12.9	12.9	11.9	11.9	10.9
65°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	5.9	5.9
67.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
70°	1.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
72.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
75°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
77.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
80°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
82.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	488.8	488.8	488.8	488.8	488.8	488.8	488.8	488.8	488.8	488.8	488.8
2.5°	586.9	586.9	584.0	579.1	562.1	559.2	563.1	565.1	546.3	554.3	543.4
5°	704.9	689.0	687.1	679.1	667.3	657.3	648.4	646.5	624.6	618.6	601.8
7.5°	838.7	810.0	789.2	789.2	781.2	757.5	729.7	706.9	703.0	667.3	650.4
10°	985.5	953.8	918.1	900.3	867.5	835.8	804.1	762.4	749.5	708.9	685.1
12.5°	1133.2	1099.6	1050.9	1004.3	940.8	899.2	867.5	827.8	772.3	747.6	705.9
15°	1265.1	1200.6	1159.0	1086.6	1019.2	961.8	911.2	870.5	794.2	758.5	704.9
16°	1304.8	1227.5	1177.9	1107.4	1045.0	981.5	918.1	870.5	798.2	750.5	696.0
17°	1337.4	1250.2	1187.8	1121.3	1064.8	993.5	919.1	860.6	799.1	736.6	685.1
18°	1364.2	1273.1	1194.7	1131.3	1074.8	997.4	913.1	844.8	794.2	718.8	669.2
19°	1384.0	1292.8	1197.7	1133.2	1071.7	989.5	902.2	823.9	779.3	698.0	649.4
20°	1394.0	1302.7	1197.7	1127.3	1054.9	971.7	882.4	802.1	756.4	677.2	626.6
21°	1392.0	1304.8	1193.7	1111.4	1027.1	943.9	862.6	780.3	725.7	655.4	602.8
22°	1376.2	1290.9	1183.8	1087.6	993.5	912.2	835.8	756.4	691.1	631.6	577.0
23°	1348.3	1265.1	1166.0	1057.8	957.8	877.4	804.1	731.6	655.4	605.8	548.2
24°	1311.7	1224.4	1136.2	1021.2	922.1	840.8	770.4	704.9	624.6	577.0	519.5
25°	1264.1	1171.9	1093.5	977.6	885.4	804.1	731.6	673.2	591.9	545.3	488.8
26°	1216.6	1111.4	1037.0	934.9	845.7	766.4	691.1	636.5	559.2	510.6	458.1
27°	1155.0	1049.0	974.6	882.4	805.1	726.8	648.4	594.9	527.4	473.9	427.3
28°	1088.6	985.5	907.2	826.9	759.5	683.1	603.8	549.3	494.7	437.3	395.6
29°	1020.2	923.0	841.7	771.3	709.9	636.5	558.1	503.7	461.0	400.6	364.9
30°	949.8	860.6	778.3	720.8	653.4	585.0	512.6	460.0	424.3	366.8	334.2
31°	878.4	797.1	716.9	662.3	593.8	532.4	469.0	418.4	386.7	335.1	305.4
32°	806.0	734.7	659.3	602.8	534.4	479.9	427.3	380.8	348.0	310.3	278.6
33°	735.6	671.3	596.9	546.3	478.9	430.3	385.7	346.0	311.3	281.6	252.9
34°	669.2	610.8	545.3	493.8	430.3	385.7	348.0	315.3	278.6	256.8	228.1
35°	606.8	550.3	495.7	445.1	387.7	347.0	313.3	285.5	249.8	232.0	204.2
36°	550.3	493.8	447.2	402.5	351.0	314.3	282.5	258.8	225.0	206.2	183.4
37°	496.7	438.2	400.6	362.9	318.2	284.6	254.8	234.0	204.2	186.4	165.5
38°	450.1	394.6	359.9	323.2	289.5	258.8	230.0	211.1	184.4	167.6	149.7
39°	405.6	360.9	321.2	291.5	262.8	235.0	207.3	188.4	168.5	150.7	135.9
40°	365.9	326.2	288.6	266.7	238.0	213.2	188.4	168.5	153.7	134.8	122.9
42.5°	280.6	253.8	225.0	203.3	179.4	161.6	145.8	129.8	118.9	106.1	97.2
45°	207.3	188.4	171.6	151.7	135.9	122.0	113.0	102.1	90.3	84.3	76.3
47.5°	150.7	135.9	126.9	113.0	102.1	92.2	85.3	78.3	69.4	64.5	58.4
50°	108.0	98.1	90.3	82.3	76.3	69.4	62.4	57.5	51.5	47.6	43.7
52.5°	77.3	70.4	63.4	58.4	54.6	49.6	44.6	40.7	38.7	34.7	31.7
55°	51.5	47.6	42.6	39.7	35.7	32.7	30.7	27.7	25.8	24.8	22.8
57.5°	31.7	28.8	27.7	24.8	22.8	20.8	19.8	18.9	17.8	16.8	15.9
60°	17.8	16.8	15.9	15.9	14.9	13.9	12.9	12.9	11.9	10.9	10.9
62.5°	10.9	9.9	9.9	8.9	8.9	8.9	8.0	8.0	8.0	6.9	6.9
65°	5.9	5.9	5.9	5.9	5.9	5.9	5.0	5.0	5.9	5.9	5.0
67.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
70°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0
72.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0



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CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
75°	1.9	1.9	1.9	1.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0
77.5°	1.9	1.9	1.9	1.9	1.9	3.0	3.0	3.0	3.0	3.0	3.0
80°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.0	3.0
82.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.9	1.0	1.9
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	488.8	488.8	488.8	488.8	488.8	488.8	488.8	488.8	488.8	488.8	488.8
2.5°	540.3	534.4	541.3	535.4	522.5	518.6	519.5	504.7	497.8	490.7	488.8
5°	592.9	584.0	572.1	561.2	547.3	539.4	526.4	513.6	502.7	502.7	483.8
7.5°	633.5	616.7	587.9	570.1	561.2	543.4	520.5	515.5	501.6	491.7	473.0
10°	656.4	628.6	600.8	576.0	558.1	531.4	512.6	496.7	479.9	452.1	443.2
12.5°	666.3	628.6	606.8	574.1	536.4	511.6	492.8	460.0	438.2	412.5	397.6
15°	658.3	616.7	581.0	545.3	502.7	477.9	449.1	416.4	393.6	377.7	351.0
16°	647.4	605.8	561.2	524.5	485.8	459.0	424.3	398.5	376.8	362.9	334.2
17°	633.5	589.9	538.4	501.6	467.0	439.2	401.6	381.7	359.9	346.0	318.2
18°	616.7	571.1	516.5	478.9	449.1	417.4	382.7	364.9	344.0	327.2	302.4
19°	597.8	549.3	497.8	458.1	431.3	396.6	363.8	346.0	326.2	307.3	286.5
20°	574.1	525.5	477.9	437.3	409.4	375.8	346.0	327.2	307.3	285.5	270.7
21°	549.3	499.7	457.1	417.4	387.7	355.0	328.1	307.3	288.6	265.7	253.8
22°	522.5	473.0	437.3	397.6	364.9	336.1	311.3	287.5	269.7	247.9	236.9
23°	495.7	447.2	415.4	377.7	342.0	315.3	293.5	267.6	250.8	232.0	220.1
24°	468.0	422.4	391.6	356.0	319.3	296.4	274.6	248.9	233.0	218.1	204.2
25°	440.2	397.6	366.8	332.1	298.5	276.6	254.8	232.0	217.2	204.2	188.4
26°	411.5	372.8	339.0	310.3	277.6	257.8	235.0	216.1	201.2	190.3	175.4
27°	383.7	347.0	312.3	285.5	257.8	239.9	216.1	200.2	187.4	178.5	163.6
28°	355.0	321.2	286.5	262.8	239.9	222.1	198.3	186.4	175.4	166.6	152.7
29°	328.1	296.4	263.8	241.9	222.1	204.2	183.4	173.5	162.6	153.7	141.8
30°	302.4	271.6	242.9	222.1	204.2	186.4	169.5	159.6	150.7	139.8	130.9
31°	276.6	248.9	223.1	204.2	186.4	171.6	156.7	146.8	137.8	126.9	120.0
32°	251.8	226.0	204.2	186.4	170.5	156.7	144.7	133.8	125.0	115.1	109.0
33°	228.1	204.2	186.4	171.6	154.6	143.7	132.8	122.0	114.0	104.1	99.1
34°	205.2	184.4	170.5	156.7	140.8	130.9	122.0	110.1	103.1	95.2	90.3
35°	184.4	167.6	154.6	141.8	126.9	118.9	110.1	99.1	93.2	87.2	81.3
36°	166.6	151.7	138.8	127.9	115.1	108.0	99.1	90.3	84.3	79.4	74.4
37°	150.7	136.8	125.0	115.1	104.1	98.1	89.2	82.3	77.3	73.3	67.4
38°	136.8	125.0	112.0	104.1	94.1	89.2	79.4	75.4	70.4	67.4	62.4
39°	122.9	112.0	101.1	93.2	86.3	80.3	72.4	68.4	64.5	61.5	57.5
40°	111.1	101.1	91.2	84.3	78.3	72.4	66.4	62.4	59.5	56.5	52.5
42.5°	87.2	80.3	73.3	67.4	62.4	57.5	54.6	50.6	47.6	44.6	42.6
45°	68.4	63.4	59.5	54.6	49.6	45.6	43.7	39.7	37.6	35.7	34.7
47.5°	52.5	48.6	45.6	42.6	38.7	36.7	33.7	31.7	29.8	29.8	27.7
50°	39.7	36.7	33.7	31.7	29.8	27.7	25.8	24.8	23.8	23.8	22.8
52.5°	29.8	26.7	25.8	23.8	22.8	21.8	20.8	19.8	18.9	17.8	17.8
55°	20.8	19.8	18.9	17.8	16.8	15.9	15.9	14.9	14.9	13.9	13.9
57.5°	14.9	13.9	13.9	12.9	12.9	11.9	11.9	11.9	10.9	11.9	10.9
60°	9.9	9.9	9.9	9.9	9.9	8.9	8.9	8.9	8.9	8.9	8.9
62.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	8.0
65°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
67.5°	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.9
70°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0
72.5°	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0



TEST NUMBER: P189482

CATALOG NUMBER: ML4D09NFL935-TIR50AWW25-TL43R2GMWWB_TL44S2GMWWB

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
75°	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0
77.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0
80°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
82.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.0	3.0	3.0
85°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P189482

CATALOG NUMBER: ML4D09NFL935-TIR50AWW25-TL43R2GMWWB_TL44S2GMWWB

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	488.8	488.8	488.8	488.8	488.8	488.8	488.8	488.8
2.5°	492.8	489.8	477.9	468.0	436.3	409.4	400.6	385.7
5°	482.9	467.0	461.0	457.1	390.7	359.9	328.1	319.3
7.5°	454.1	439.2	436.3	431.3	350.0	307.3	276.6	271.6
10°	419.4	408.5	395.6	382.7	304.4	255.8	235.9	231.0
12.5°	384.6	371.8	350.0	333.1	255.8	213.2	199.3	190.3
15°	342.0	322.2	306.4	294.5	216.1	181.5	165.5	158.6
16°	322.2	302.4	289.5	280.6	200.2	170.5	154.6	148.7
17°	302.4	283.6	273.7	265.7	188.4	159.6	143.7	140.8
18°	283.6	267.6	258.8	251.8	177.5	148.7	134.8	132.8
19°	266.7	252.9	244.9	235.9	167.6	138.8	126.9	126.9
20°	250.8	239.0	230.0	220.1	156.7	128.9	121.0	120.0
21°	235.9	226.0	215.1	202.3	146.8	120.0	114.0	114.0
22°	223.1	211.1	199.3	187.4	136.8	111.1	108.0	108.0
23°	209.2	198.3	185.4	173.5	126.9	103.1	102.1	101.1
24°	195.3	184.4	172.5	162.6	117.0	97.2	96.2	94.1
25°	182.5	170.5	159.6	151.7	108.0	90.3	89.2	88.2
26°	169.5	158.6	148.7	141.8	100.2	85.3	83.2	83.2
27°	156.7	145.8	137.8	132.8	93.2	80.3	77.3	78.3
28°	143.7	133.8	127.9	122.9	86.3	75.4	72.4	74.4
29°	131.9	123.9	118.9	114.0	80.3	70.4	68.4	70.4
30°	121.0	114.0	109.0	104.1	74.4	65.5	65.5	68.4
31°	110.1	105.1	99.1	94.1	68.4	60.5	62.4	66.4
32°	101.1	96.2	90.3	85.3	63.4	56.5	60.5	64.5
33°	93.2	89.2	82.3	77.3	58.4	53.6	58.4	62.4
34°	85.3	81.3	74.4	69.4	53.6	50.6	56.5	60.5
35°	78.3	73.3	67.4	63.4	48.6	47.6	54.6	58.4
36°	71.4	66.4	61.5	58.4	44.6	45.6	52.5	56.5
37°	64.5	60.5	56.5	54.6	41.6	43.7	50.6	54.6
38°	58.4	55.5	52.5	50.6	39.7	41.6	48.6	52.5
39°	53.6	50.6	48.6	46.6	37.6	39.7	45.6	50.6
40°	48.6	46.6	44.6	43.7	35.7	37.6	43.7	48.6
42.5°	39.7	38.7	37.6	35.7	30.7	32.7	38.7	43.7
45°	32.7	32.7	30.7	29.8	26.7	27.7	34.7	38.7
47.5°	26.7	25.8	24.8	24.8	22.8	24.8	29.8	32.7
50°	21.8	20.8	20.8	20.8	19.8	22.8	26.7	28.8
52.5°	16.8	16.8	16.8	16.8	17.8	20.8	24.8	26.7
55°	13.9	13.9	13.9	13.9	15.9	18.9	23.8	25.8
57.5°	11.9	10.9	10.9	10.9	13.9	17.8	21.8	23.8
60°	8.9	8.9	8.9	9.9	12.9	16.8	20.8	21.8
62.5°	8.0	8.0	8.0	8.0	11.9	15.9	18.9	20.8
65°	6.9	6.9	6.9	6.9	10.9	14.9	18.9	19.8
67.5°	5.9	5.9	5.9	5.9	9.9	13.9	17.8	18.9
70°	5.0	5.0	5.0	5.9	8.9	12.9	15.9	16.8
72.5°	5.0	5.0	5.0	5.9	8.0	11.9	14.9	15.9



TEST NUMBER: P189482

CATALOG NUMBER: ML4D09NFL935-TIR50AWW25-TL43R2GMWWB_TL44S2GMWWB

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
75°	4.0	5.0	5.0	5.0	8.0	10.9	12.9	13.9
77.5°	4.0	4.0	4.0	4.0	6.9	8.9	11.9	12.9
80°	4.0	4.0	4.0	4.0	5.0	8.0	9.9	9.9
82.5°	3.0	3.0	3.0	3.0	4.0	5.9	6.9	6.9
85°	1.9	1.9	1.9	1.9	3.0	4.0	4.0	4.0
87.5°	1.0	1.0	1.0	1.0	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)