

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: INVUE

Report Number: P140270

Luminaire Tested: **ECM-E02-LED-E1-5MQ**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140270
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33686)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-E02-LED-E1-5MQ
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (42) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6107.5 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

Input Watts (W): 52.1
Input Voltage (V): NR
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: 25 FT

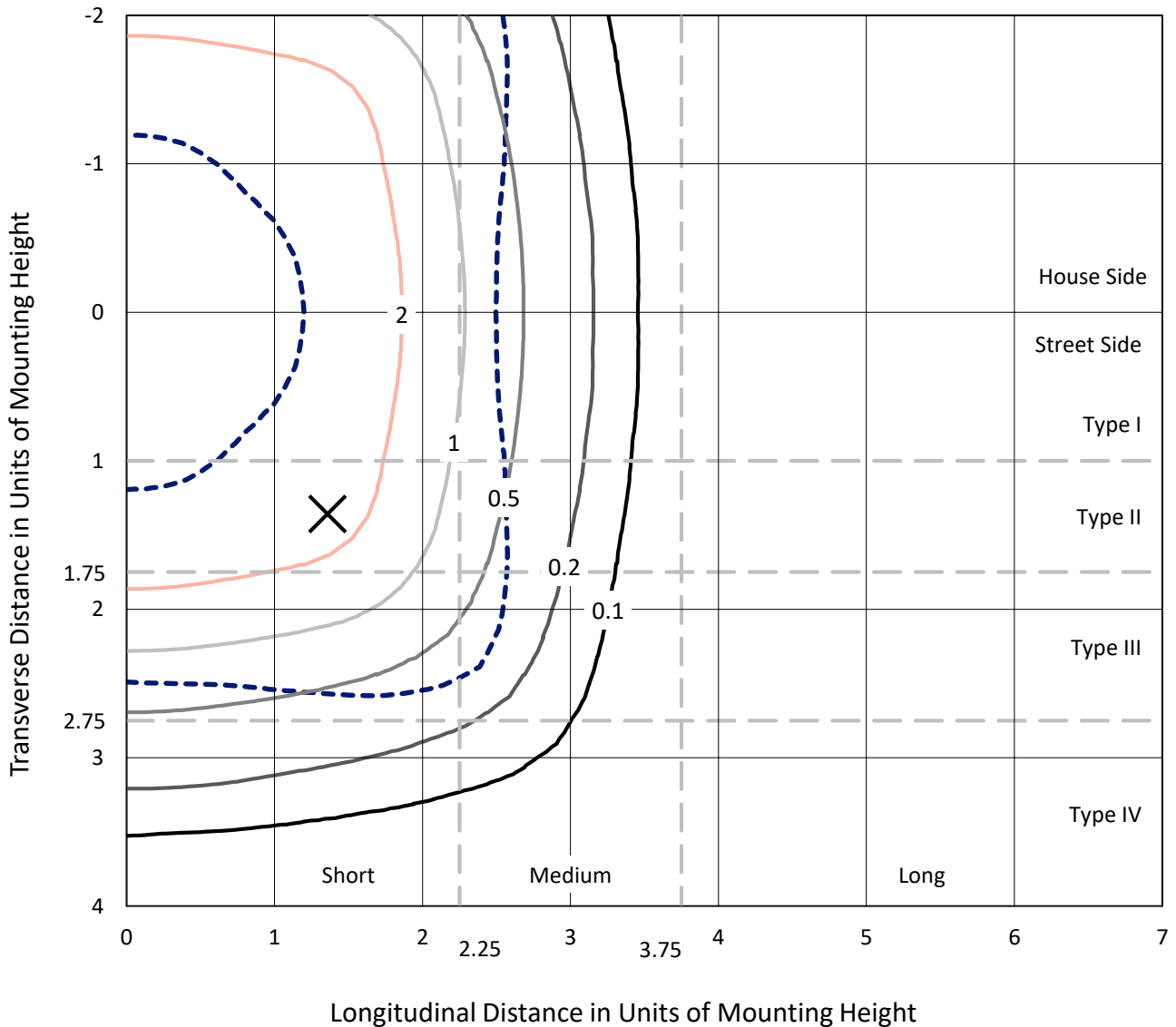


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Iso-Footcandle Lines of Horizontal Illumination

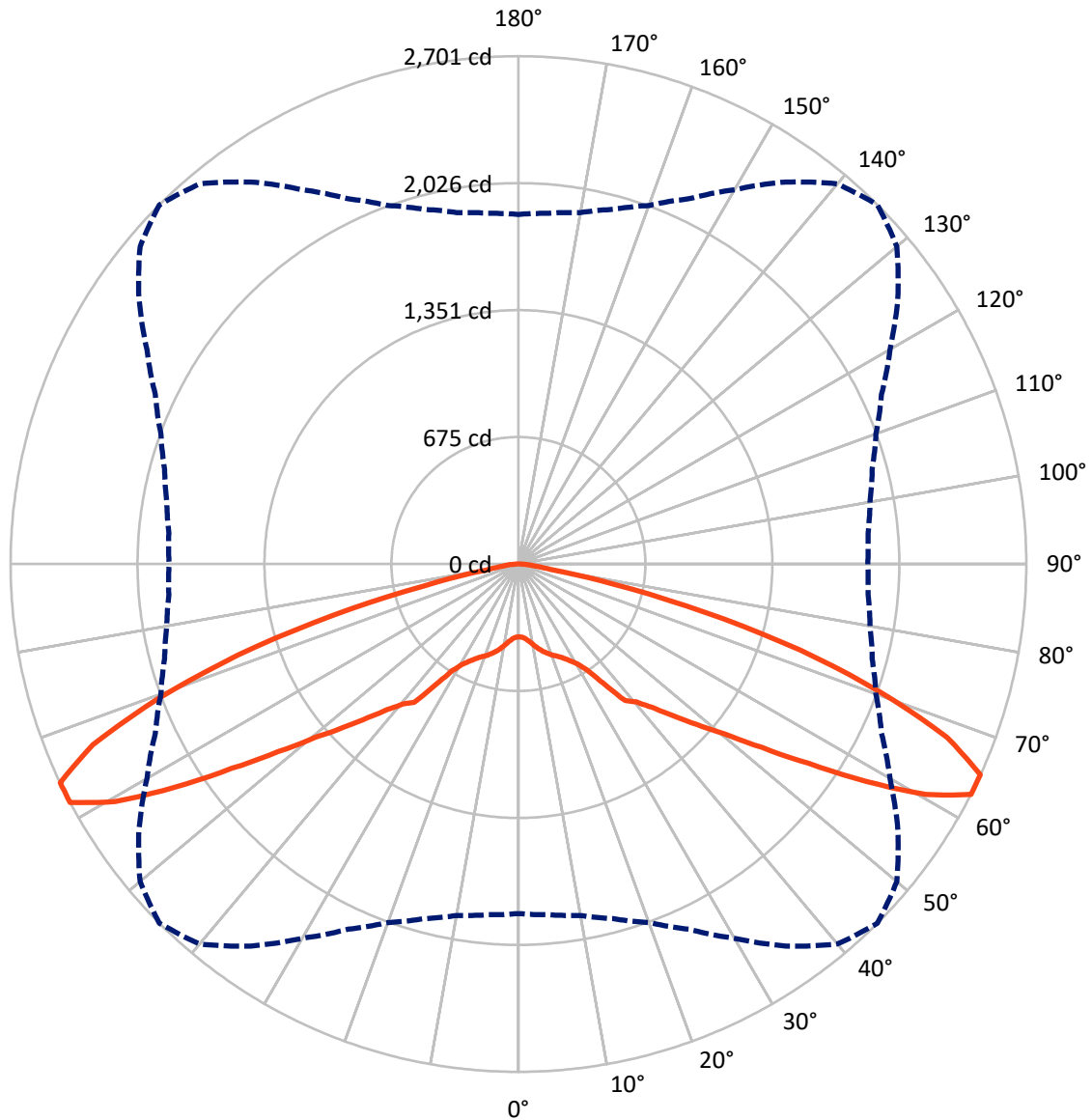
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.5 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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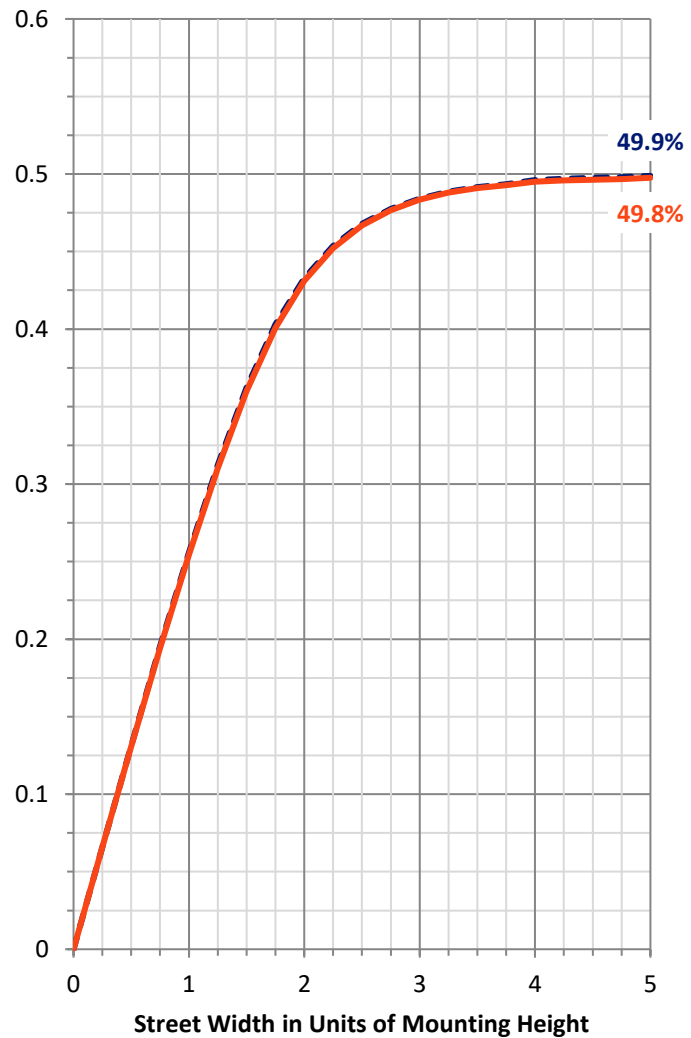
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3053.8	0.0	3053.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3053.8	0.0	3053.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	6107.5	0.0	6107.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.4	0.6
10°-20°	137.2	2.2
20°-30°	263.6	4.3
30°-40°	507.1	8.3
40°-50°	882.6	14.5
50°-60°	1585.4	26.0
60°-70°	1943.4	31.8
70°-80°	685.4	11.2
80°-90°	63.4	1.0
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°-90°	6107.5	100.0
0°-180°	6107.5	100.0



--- HS — SS

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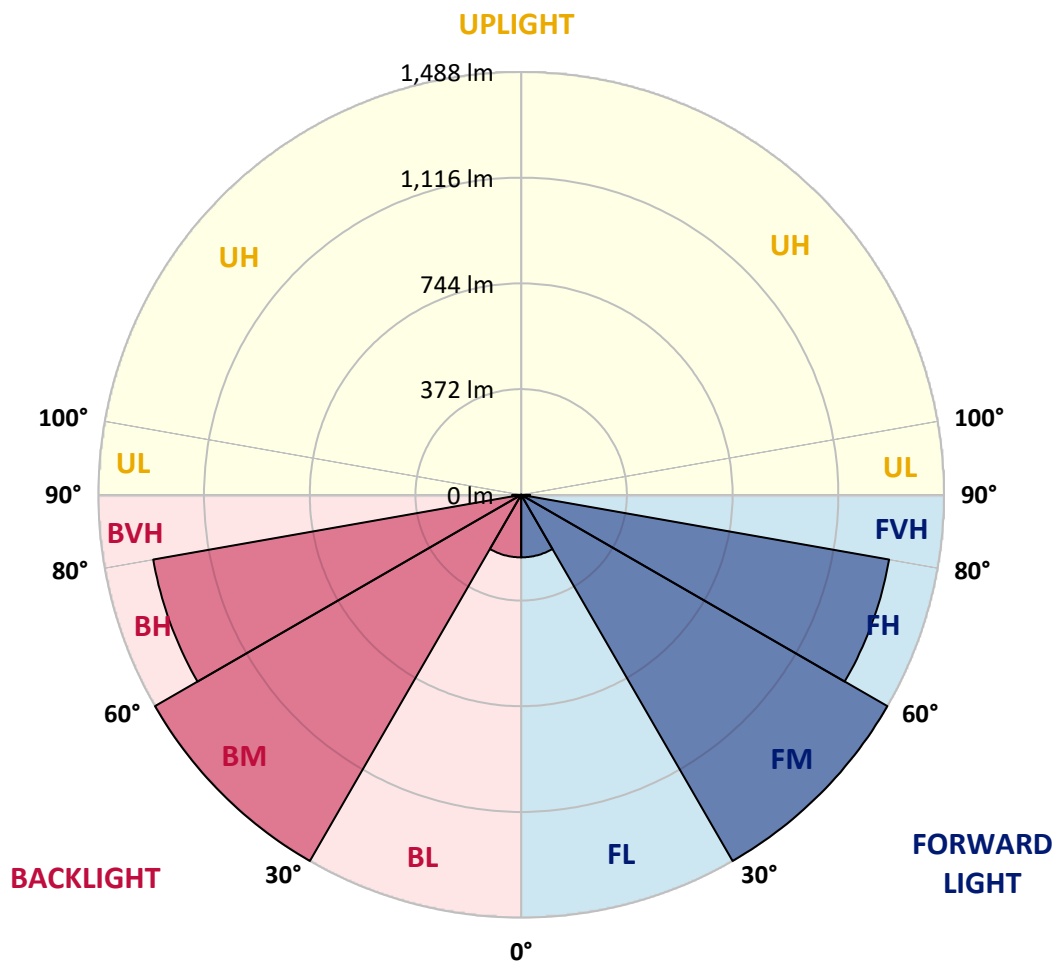
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	220.1	3.6			
FM	(30°-60°)	1487.6	24.4			
FH	(60°-80°)	1314.4	21.5			G1/1800
FVH	(80°-90°)	31.7	0.5			G1/100
BL	(0°-30°)	220.1	3.6	B1/500		
BM	(30°-60°)	1487.6	24.4	B2/2500		
BH	(60°-80°)	1314.4	21.5	B3/2500		G1/1800
BVH	(80°-90°)	31.7	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	387.3	387.3	387.3	387.3	387.3	387.3	387.3	387.3	387.3	387.3	387.3
2.5°	392.0	392.0	391.3	390.7	390.7	390.7	390.0	390.0	390.7	389.3	389.3
5°	402.0	402.7	402.0	401.3	400.7	400.7	400.0	400.0	400.7	399.3	398.7
7.5°	420.7	421.3	420.0	419.3	418.7	418.0	417.3	416.7	417.3	415.3	415.3
10°	444.7	444.7	444.7	442.0	442.0	440.0	439.3	438.0	438.7	436.7	436.7
12.5°	468.7	468.7	468.0	466.7	466.0	464.7	463.3	463.3	462.0	459.3	458.0
15°	490.0	490.7	490.0	488.0	487.3	485.3	485.3	484.0	482.0	480.7	479.3
17.5°	510.0	510.7	508.7	508.0	506.0	504.7	503.3	502.7	501.3	499.3	498.7
20°	529.3	528.7	526.7	524.0	522.7	521.3	520.0	519.3	518.7	517.3	517.3
22.5°	548.0	548.0	546.0	542.0	539.3	538.0	536.0	534.7	533.3	532.7	534.0
25°	576.0	575.3	571.3	567.3	562.7	558.7	556.0	555.3	554.0	554.0	554.7
27.5°	612.0	610.7	604.7	599.3	594.0	588.7	585.3	582.7	582.0	581.3	581.3
30°	657.3	655.3	650.0	643.3	637.3	630.7	624.0	622.0	618.7	616.0	620.7
32.5°	744.0	745.3	734.7	721.3	708.0	695.3	684.0	675.3	670.0	670.7	670.7
35°	839.3	840.0	835.3	830.0	826.0	818.7	806.0	795.3	787.3	778.7	782.7
37.5°	880.7	881.3	877.3	876.7	879.3	884.0	896.7	906.0	920.0	922.0	918.0
40°	953.3	950.0	944.7	943.3	941.3	948.0	953.3	958.0	960.0	964.0	960.0
42.5°	1029.3	1028.0	1024.0	1019.3	1019.3	1020.7	1029.3	1036.7	1041.3	1042.0	1041.3
45°	1114.7	1112.7	1109.3	1108.7	1110.7	1116.7	1122.7	1132.0	1146.7	1147.3	1146.7
47.5°	1208.7	1210.0	1204.7	1206.7	1210.0	1220.0	1236.7	1252.0	1268.0	1274.0	1266.7
50°	1337.3	1332.7	1332.7	1330.7	1339.3	1354.0	1374.0	1392.0	1414.7	1420.0	1408.7
52.5°	1512.0	1502.0	1504.0	1498.7	1503.3	1516.7	1549.3	1577.3	1606.0	1620.0	1598.0
55°	1722.0	1705.3	1707.3	1712.7	1716.7	1739.3	1780.7	1812.7	1866.7	1871.3	1846.0
57.5°	1894.0	1889.3	1892.0	1904.7	1930.0	1969.3	2021.3	2098.7	2165.3	2181.3	2154.0
60°	1956.7	1960.0	1978.7	2012.0	2060.0	2130.0	2231.3	2352.0	2458.0	2490.0	2448.7
62.5°	1859.3	1872.7	1898.0	1953.3	2029.3	2143.3	2298.7	2480.7	2639.3	2701.3	2627.3
65°	1669.3	1678.0	1719.3	1766.7	1864.7	1995.3	2186.0	2422.7	2618.0	2700.0	2617.3
67.5°	1420.0	1436.7	1472.7	1531.3	1616.0	1748.7	1948.7	2190.7	2386.7	2458.7	2386.0
70°	1140.0	1147.3	1170.0	1216.0	1304.0	1421.3	1592.7	1809.3	2000.0	2045.3	1987.3
72.5°	790.7	805.3	824.7	866.7	922.0	1021.3	1162.7	1322.0	1475.3	1569.3	1484.0
75°	340.7	321.3	364.0	406.0	474.0	566.0	676.7	807.3	959.3	1022.0	938.0
77.5°	102.0	101.3	108.0	120.0	144.0	190.7	267.3	355.3	472.7	513.3	440.7
80°	83.3	86.0	88.7	91.3	94.0	97.3	103.3	120.7	148.0	174.7	142.0
82.5°	70.7	74.0	81.3	85.3	87.3	88.0	88.0	87.3	84.0	82.7	82.0
85°	53.3	58.7	68.7	74.7	74.7	74.7	74.7	72.7	68.0	60.0	66.7
87.5°	18.0	24.0	40.0	42.7	44.0	40.7	42.7	43.3	36.0	27.3	34.7
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°	60°	65°	70°	75°	80°	85°	90°
0°	387.3	387.3	387.3	387.3	387.3	387.3	387.3	387.3
2.5°	389.3	389.3	389.3	390.0	389.3	389.3	389.3	389.3
5°	399.3	398.7	399.3	398.7	399.3	399.3	398.7	399.3
7.5°	414.7	414.7	415.3	415.3	414.7	414.7	414.7	414.7
10°	435.3	434.0	434.7	434.7	434.7	434.0	434.0	433.3
12.5°	456.7	455.3	455.3	455.3	455.3	454.7	455.3	455.3
15°	476.7	475.3	474.0	474.0	474.7	475.3	475.3	474.7
17.5°	496.0	494.7	492.7	492.7	492.0	493.3	494.7	494.0
20°	515.3	514.7	511.3	511.3	511.3	512.7	513.3	515.3
22.5°	534.7	534.0	531.3	530.7	531.3	534.0	536.0	536.0
25°	555.3	556.7	556.0	556.0	557.3	561.3	563.3	566.0
27.5°	584.7	587.3	588.0	590.7	591.3	596.0	599.3	603.3
30°	622.7	627.3	630.0	634.7	638.0	640.7	645.3	648.7
32.5°	675.3	686.7	700.0	715.3	722.0	734.0	739.3	740.7
35°	796.7	808.7	820.0	826.7	824.0	827.3	827.3	830.0
37.5°	906.0	894.0	884.0	882.0	876.7	874.7	875.3	877.3
40°	956.7	950.7	946.7	948.7	946.0	944.0	945.3	946.0
42.5°	1038.7	1029.3	1026.0	1025.3	1024.0	1025.3	1028.7	1027.3
45°	1134.7	1122.7	1118.0	1117.3	1115.3	1114.7	1116.0	1118.7
47.5°	1250.0	1235.3	1220.7	1216.0	1216.0	1212.0	1214.7	1210.7
50°	1391.3	1367.3	1352.0	1343.3	1338.0	1332.0	1337.3	1328.7
52.5°	1577.3	1543.3	1526.7	1515.3	1500.0	1500.7	1502.0	1498.7
55°	1812.0	1774.7	1742.0	1720.0	1710.7	1705.3	1704.0	1714.7
57.5°	2082.0	2016.0	1964.0	1925.3	1910.7	1890.7	1881.3	1881.3
60°	2338.7	2218.7	2115.3	2050.7	2002.7	1968.7	1946.0	1939.3
62.5°	2464.0	2282.0	2130.7	2024.0	1948.0	1899.3	1866.7	1858.0
65°	2410.0	2178.7	2000.7	1880.7	1792.7	1730.0	1692.0	1681.3
67.5°	2192.7	1950.7	1763.3	1642.7	1548.0	1480.0	1451.3	1439.3
70°	1820.7	1598.7	1436.0	1318.0	1219.3	1162.0	1122.7	1106.7
72.5°	1308.7	1140.0	990.7	889.3	800.7	770.7	717.3	712.0
75°	773.3	626.7	503.3	426.0	346.7	303.3	278.7	252.0
77.5°	314.7	224.7	168.7	127.3	109.3	99.3	94.7	93.3
80°	107.3	96.0	90.7	88.7	86.0	84.7	81.3	78.7
82.5°	84.7	84.0	81.3	80.7	78.0	74.0	67.3	63.3
85°	70.7	69.3	66.0	65.3	63.3	58.0	50.7	46.0
87.5°	40.0	36.7	33.3	34.0	32.0	28.0	20.7	14.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)