

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: P140590

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140590
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33688)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-E02-LED-E1-5XQ
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (42) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5963.1 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B3 - U0 - G2

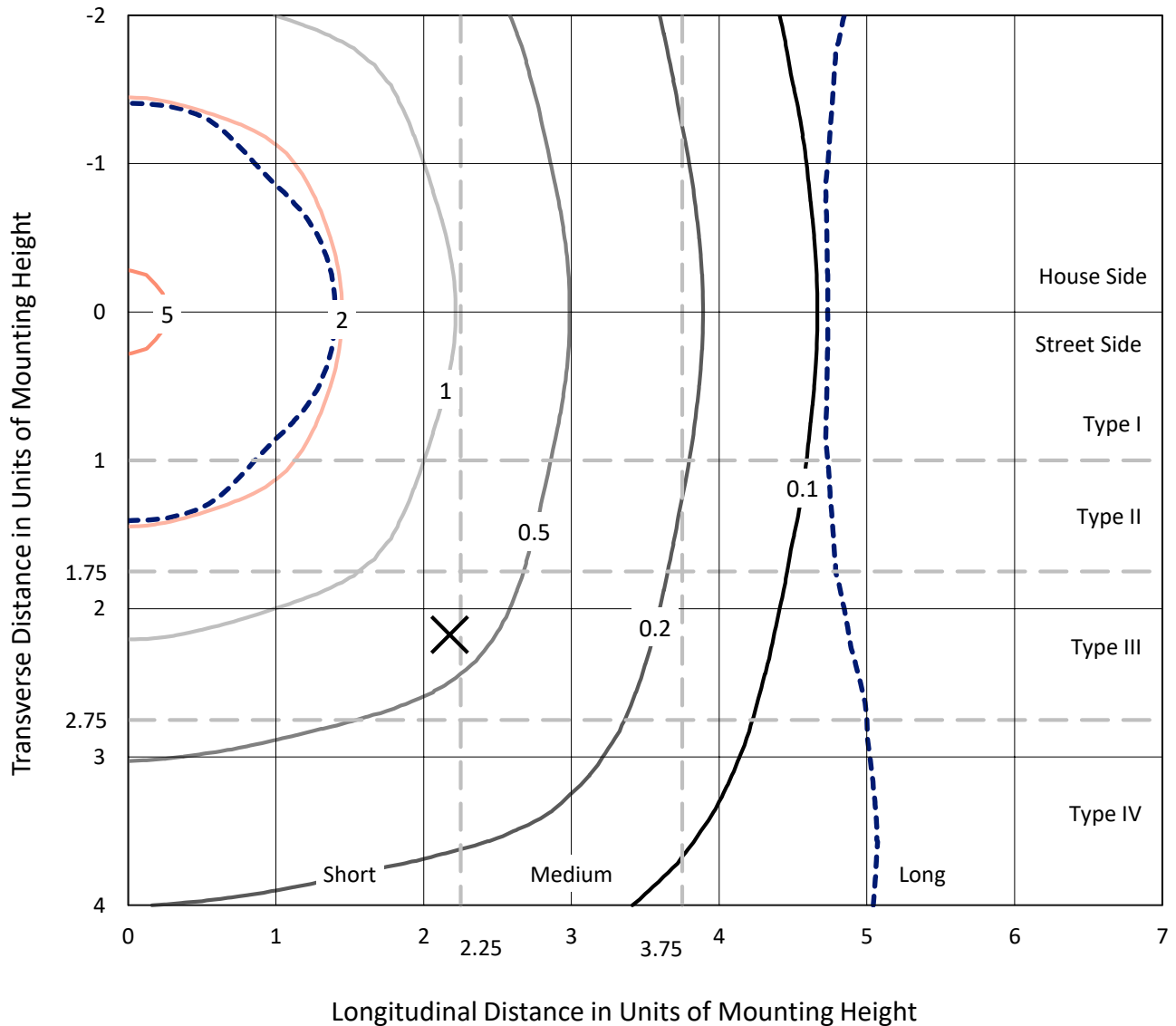
Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P140590
 CATALOG NUMBER: ECM-E02-LED-E1-5XQ

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

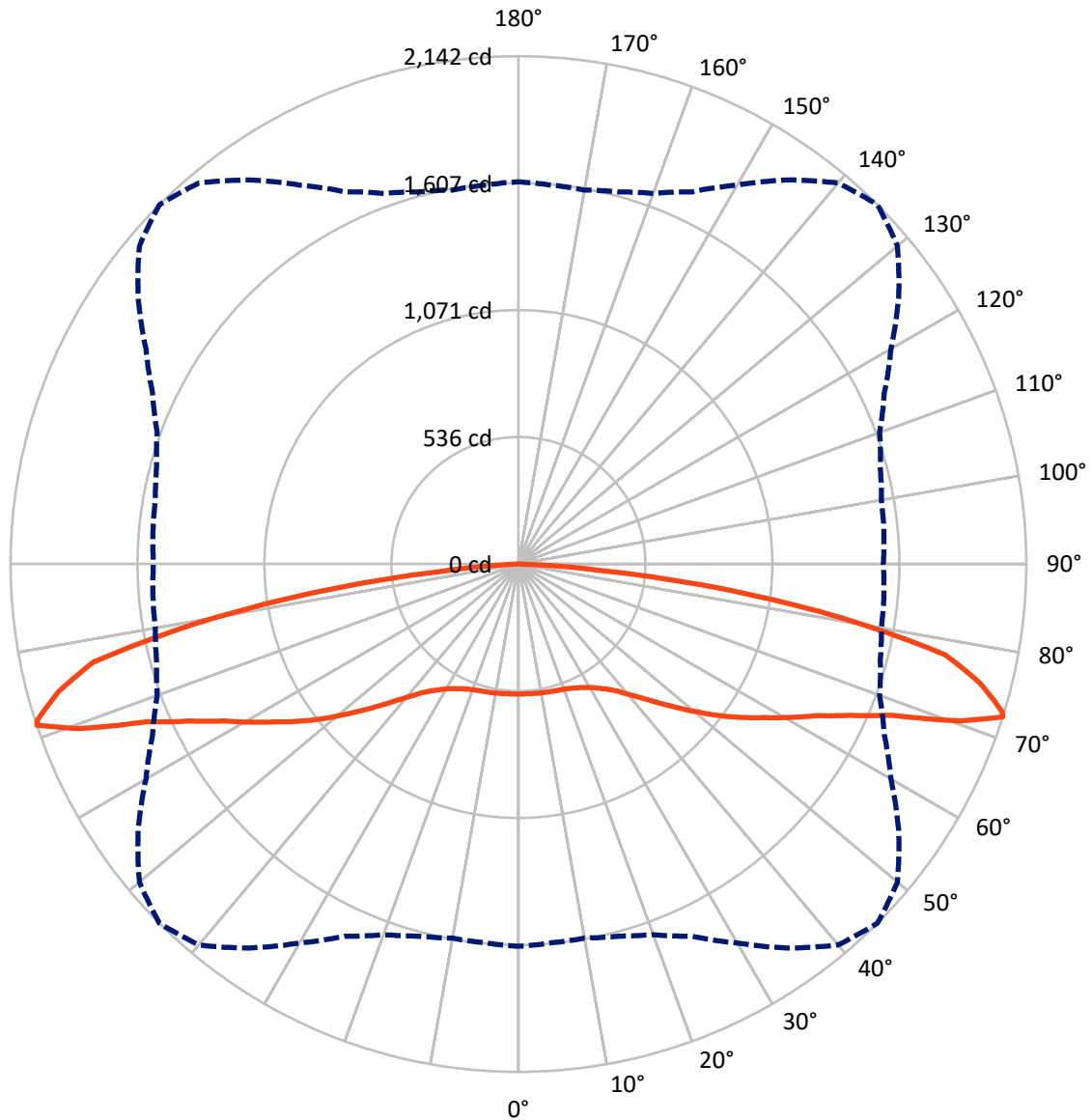


Based on 10 foot mounting height. Maximum calculated value = 5.5 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P140590

CATALOG NUMBER: ECM-E02-LED-E1-5XQ

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

REPORT NUMBER: P140590

CATALOG NUMBER: ECM-E02-LED-E1-5XQ

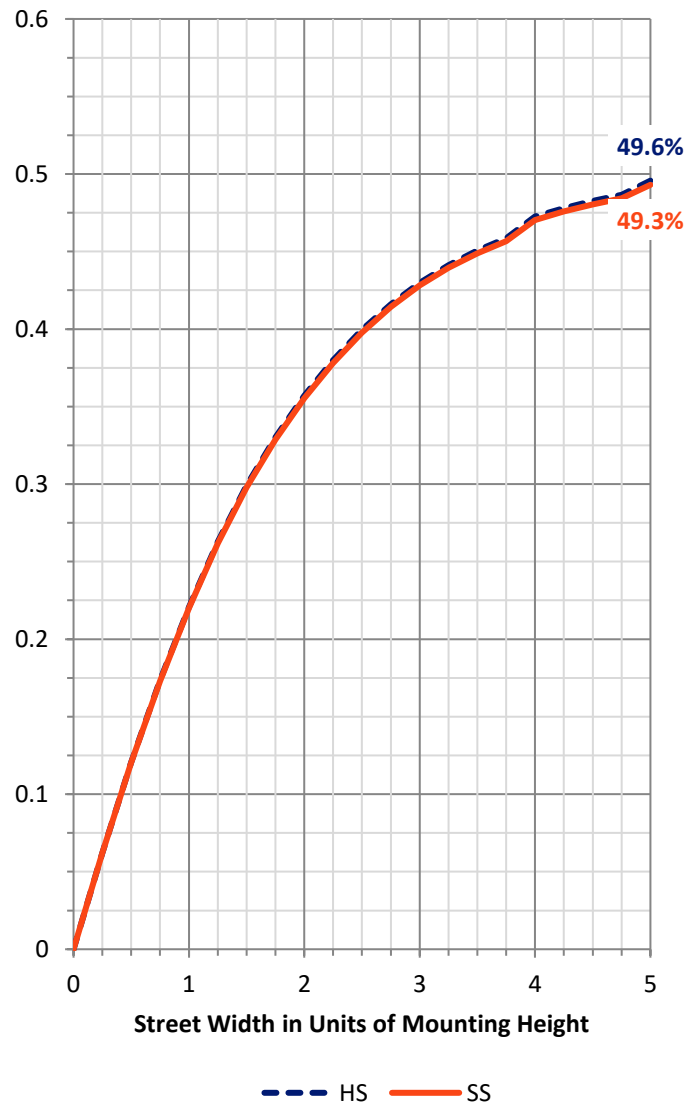
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2981.5	0.0	2981.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2981.5	0.0	2981.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	5963.1	0.0	5963.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.6	0.9
10°-20°	158.2	2.7
20°-30°	267.7	4.5
30°-40°	407.2	6.8
40°-50°	644.7	10.8
50°-60°	988.0	16.6
60°-70°	1450.6	24.3
70°-80°	1645.5	27.6
80°-90°	348.6	5.8
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°	5963.1	100.0
0°-180°	5963.1	100.0



REPORT NUMBER: P140590

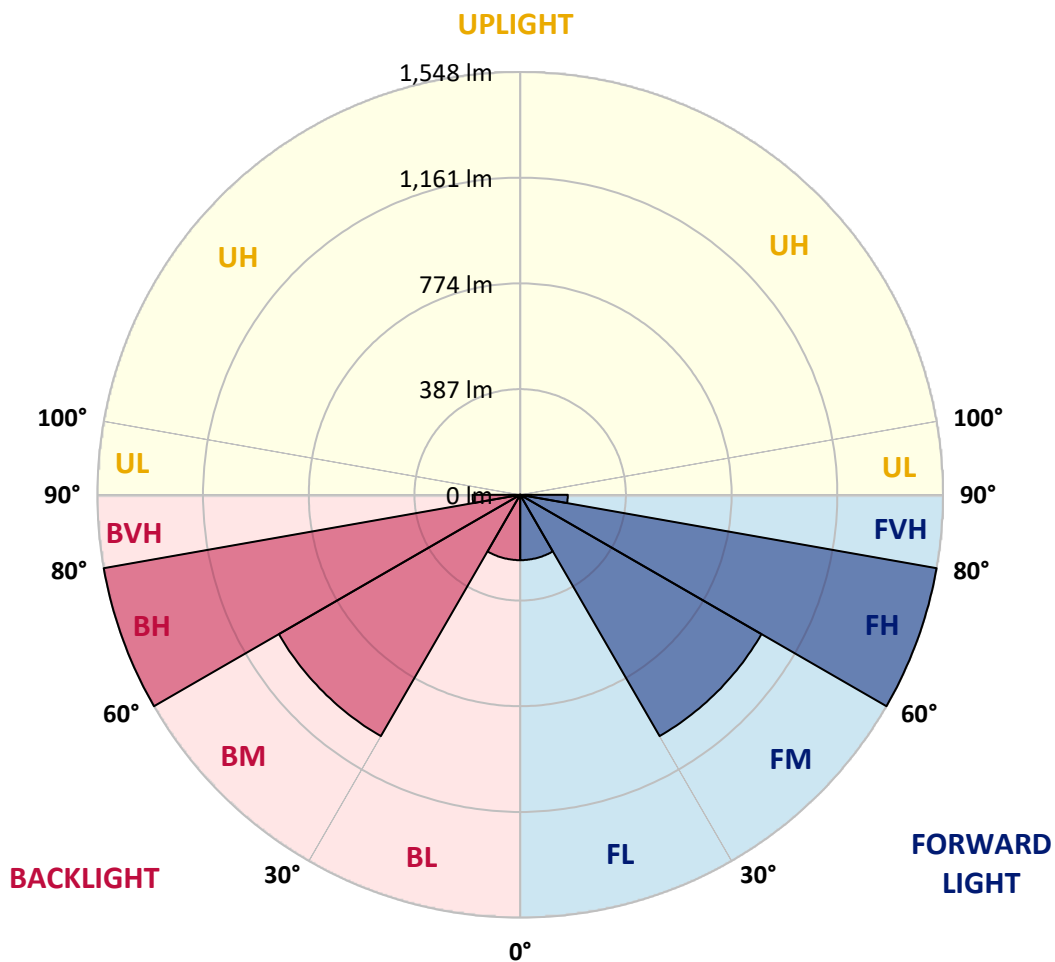
CATALOG NUMBER: ECM-E02-LED-E1-5XQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	239.2	4.0			
FM	(30°-60°)	1020.0	17.1			
FH	(60°-80°)	1548.0	26.0			G1/1800
FVH	(80°-90°)	174.3	2.9			G2/225
BL	(0°-30°)	239.2	4.0	B1/500		
BM	(30°-60°)	1020.0	17.1	B2/2500		
BH	(60°-80°)	1548.0	26.0	B3/2500		G1/1800
BVH	(80°-90°)	174.3	2.9			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type V Short





REPORT NUMBER: P140590

CATALOG NUMBER: ECM-E02-LED-E1-5XQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	548.0	548.0	548.0	548.0	548.0	548.0	548.0	548.0	548.0	548.0	548.0
2.5°	550.0	550.7	550.0	549.3	549.3	548.7	548.7	548.7	549.3	548.0	548.0
5°	551.3	552.0	551.3	550.0	550.0	550.0	549.3	549.3	550.0	549.3	549.3
7.5°	553.3	554.0	553.3	552.0	552.0	551.3	550.7	550.7	552.0	550.7	550.7
10°	555.3	556.7	555.3	554.0	554.0	553.3	552.7	552.7	553.3	552.0	552.0
12.5°	558.7	558.7	558.0	557.3	557.3	556.7	556.0	555.3	554.7	554.0	553.3
15°	561.3	562.0	560.7	560.0	559.3	558.7	558.0	558.0	556.7	556.0	556.0
17.5°	564.7	565.3	564.0	562.7	562.7	561.3	560.7	560.7	559.3	558.7	558.0
20°	568.0	568.7	567.3	566.7	566.0	565.3	564.0	564.7	564.0	562.7	562.7
22.5°	572.0	572.0	571.3	570.7	570.7	570.0	569.3	570.7	569.3	569.3	568.7
25°	576.0	576.7	576.0	576.0	576.7	576.7	577.3	578.7	578.7	578.0	577.3
27.5°	584.7	584.7	584.7	584.7	586.7	586.7	587.3	589.3	590.0	590.0	590.0
30°	596.0	596.7	596.0	596.0	598.0	598.7	600.7	602.7	604.0	604.0	604.7
32.5°	612.7	612.0	612.7	614.0	615.3	616.7	618.7	622.0	624.0	624.7	624.7
35°	634.0	634.7	634.0	634.7	637.3	639.3	641.3	645.3	646.7	648.0	648.7
37.5°	665.3	667.3	666.0	666.0	669.3	670.7	673.3	676.7	679.3	680.7	680.0
40°	710.7	710.0	708.7	709.3	710.0	711.3	714.0	720.7	724.0	724.0	724.0
42.5°	762.7	763.3	761.3	760.7	761.3	762.7	766.7	772.0	777.3	776.0	776.7
45°	822.0	817.3	818.7	817.3	818.0	822.7	829.3	832.0	837.3	837.3	838.7
47.5°	880.0	878.0	877.3	876.7	878.7	883.3	891.3	900.0	904.7	907.3	909.3
50°	945.3	942.0	941.3	942.0	942.7	944.0	959.3	968.0	979.3	981.3	980.7
52.5°	1008.7	1006.0	1004.7	1004.7	1007.3	1012.0	1028.0	1042.0	1054.7	1062.7	1059.3
55°	1077.3	1077.3	1073.3	1072.0	1076.0	1080.7	1102.7	1118.7	1136.7	1142.7	1133.3
57.5°	1148.0	1147.3	1141.3	1139.3	1142.7	1154.7	1173.3	1198.0	1217.3	1222.7	1217.3
60°	1217.3	1217.3	1214.0	1212.7	1216.0	1230.7	1253.3	1280.7	1304.0	1314.0	1305.3
62.5°	1296.7	1296.7	1288.0	1292.0	1296.7	1308.0	1336.7	1372.0	1403.3	1408.7	1400.7
65°	1386.7	1390.7	1384.0	1382.7	1388.7	1410.0	1442.7	1487.3	1524.0	1538.0	1526.0
67.5°	1524.0	1518.0	1510.0	1506.7	1516.0	1536.0	1576.0	1634.7	1688.7	1702.0	1688.0
70°	1666.7	1660.7	1658.0	1668.7	1688.7	1730.7	1792.0	1874.0	1949.3	1981.3	1952.0
72°	1612.0	1604.0	1602.0	1624.7	1663.3	1732.0	1845.3	1977.3	2097.3	2142.0	2086.7
72.5°	1584.0	1577.3	1576.7	1598.0	1640.0	1709.3	1820.7	1956.7	2085.3	2134.0	2074.7
75°	1470.7	1464.0	1470.7	1494.7	1536.7	1611.3	1724.7	1852.0	1968.0	2012.7	1954.7
77.5°	1314.0	1302.0	1308.0	1341.3	1388.0	1469.3	1589.3	1740.0	1852.0	1840.0	1754.0
80°	1048.7	1022.0	1050.7	1060.7	1114.0	1168.7	1284.7	1352.0	1390.7	1392.7	1331.3
82.5°	458.0	468.7	504.7	534.7	572.7	636.0	682.7	755.3	840.0	879.3	832.0
85°	30.0	37.3	59.3	70.7	98.0	119.3	171.3	249.3	300.7	344.0	290.0
87.5°	5.3	7.3	13.3	16.0	17.3	19.3	19.3	26.7	28.0	22.7	25.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P140590

CATALOG NUMBER: ECM-E02-LED-E1-5XQ

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	548.0	548.0	548.0	548.0	548.0	548.0	548.0	548.0
2.5°	548.0	548.0	548.7	548.0	548.0	548.0	547.3	547.3
5°	548.7	548.7	549.3	549.3	548.7	548.7	548.7	548.7
7.5°	550.7	550.0	550.7	550.7	550.0	550.0	549.3	550.0
10°	551.3	551.3	552.0	552.0	551.3	551.3	551.3	551.3
12.5°	553.3	553.3	553.3	554.0	553.3	553.3	554.0	553.3
15°	555.3	554.7	554.7	554.7	554.7	555.3	555.3	556.0
17.5°	557.3	557.3	556.7	557.3	557.3	558.0	558.0	558.0
20°	561.3	560.7	559.3	560.7	560.7	560.7	560.7	561.3
22.5°	567.3	566.0	564.7	564.7	564.0	564.7	564.0	564.0
25°	576.0	574.0	572.0	571.3	570.7	570.0	569.3	570.0
27.5°	588.7	586.0	583.3	582.0	581.3	580.0	579.3	579.3
30°	602.7	600.7	596.7	595.3	593.3	591.3	591.3	590.7
32.5°	624.0	621.3	616.7	614.7	611.3	609.3	608.7	608.7
35°	646.0	642.7	640.7	638.0	634.0	632.0	631.3	631.3
37.5°	679.3	675.3	672.7	669.3	668.7	666.0	666.0	666.0
40°	722.7	719.3	716.0	713.3	711.3	709.3	706.7	706.7
42.5°	776.0	770.7	768.7	765.3	762.7	760.7	759.3	759.3
45°	834.7	830.0	827.3	822.7	822.0	820.7	818.0	818.0
47.5°	900.7	894.0	888.7	887.3	884.0	880.7	879.3	880.0
50°	972.7	961.3	954.0	954.0	950.0	945.3	946.0	945.3
52.5°	1046.7	1034.0	1024.7	1018.0	1013.3	1012.7	1013.3	1012.7
55°	1121.3	1108.0	1096.7	1089.3	1084.7	1080.0	1079.3	1079.3
57.5°	1198.7	1182.0	1164.0	1157.3	1152.7	1150.0	1150.0	1150.7
60°	1286.0	1258.7	1236.0	1227.3	1224.0	1225.3	1224.7	1225.3
62.5°	1374.7	1343.3	1316.7	1306.7	1302.0	1301.3	1306.7	1308.7
65°	1486.7	1448.0	1418.0	1399.3	1399.3	1397.3	1403.3	1400.7
67.5°	1632.7	1578.0	1541.3	1511.3	1512.0	1514.0	1522.7	1522.0
70°	1881.3	1784.7	1716.7	1665.3	1645.3	1632.0	1629.3	1629.3
72°	1958.0	1814.0	1702.0	1621.3	1580.0	1554.7	1547.3	1539.3
72.5°	1938.0	1790.0	1676.7	1592.7	1550.0	1524.7	1513.3	1503.3
75°	1812.0	1646.7	1523.3	1435.3	1388.0	1357.3	1351.3	1346.7
77.5°	1598.7	1452.0	1324.7	1233.3	1186.0	1146.7	1130.7	1129.3
80°	1232.7	1100.7	1002.7	931.3	888.7	859.3	860.7	851.3
82.5°	727.3	616.0	532.0	436.7	374.0	338.0	315.3	312.7
85°	214.0	145.3	92.7	66.7	48.0	36.0	26.7	24.0
87.5°	19.3	15.3	12.7	10.7	10.0	8.7	5.3	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)