

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: P140430

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140430
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33687)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-E02-LED-E1-5WQ
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (42) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5974.7 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-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

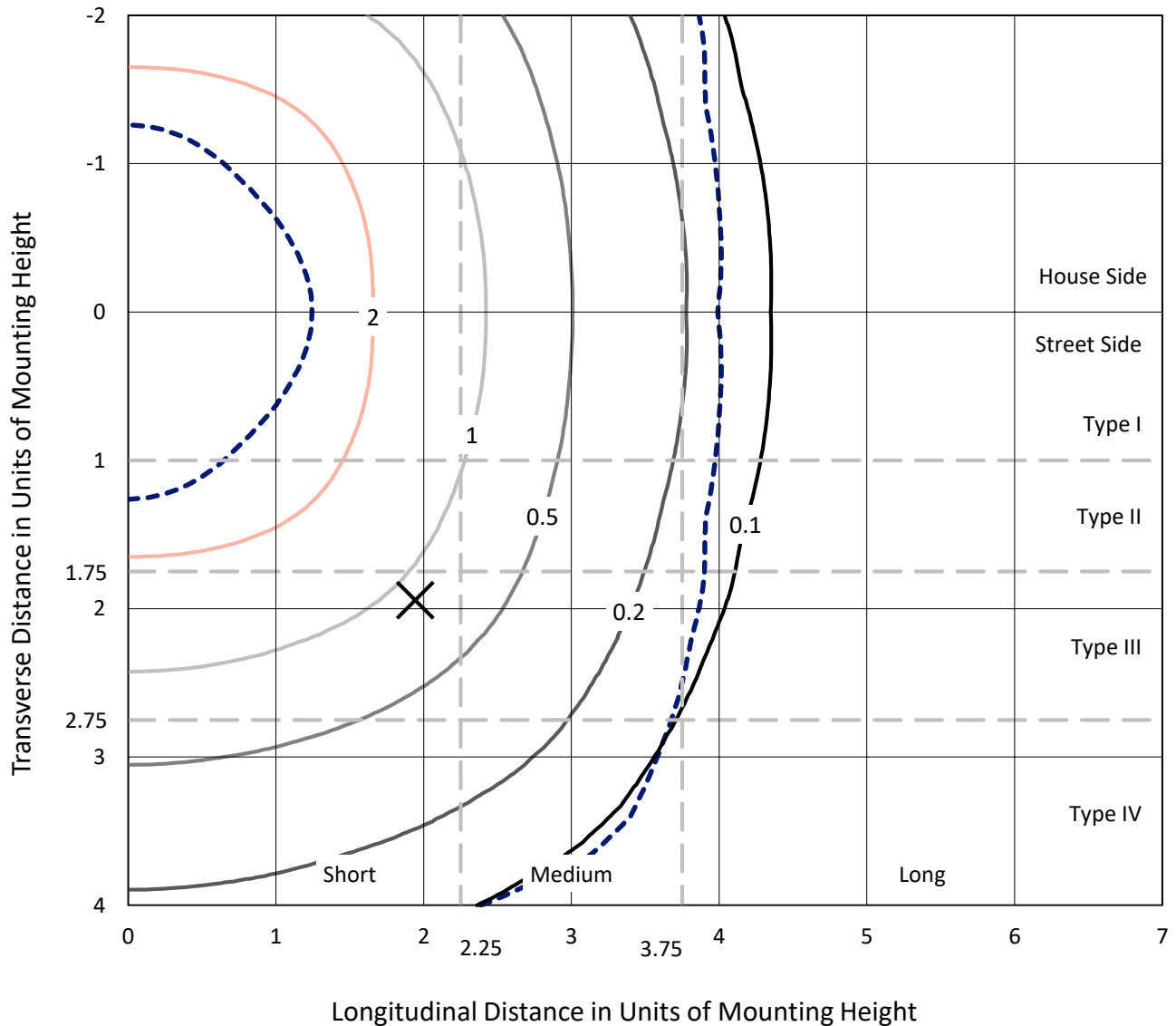


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Iso-Footcandle Lines of Horizontal Illumination

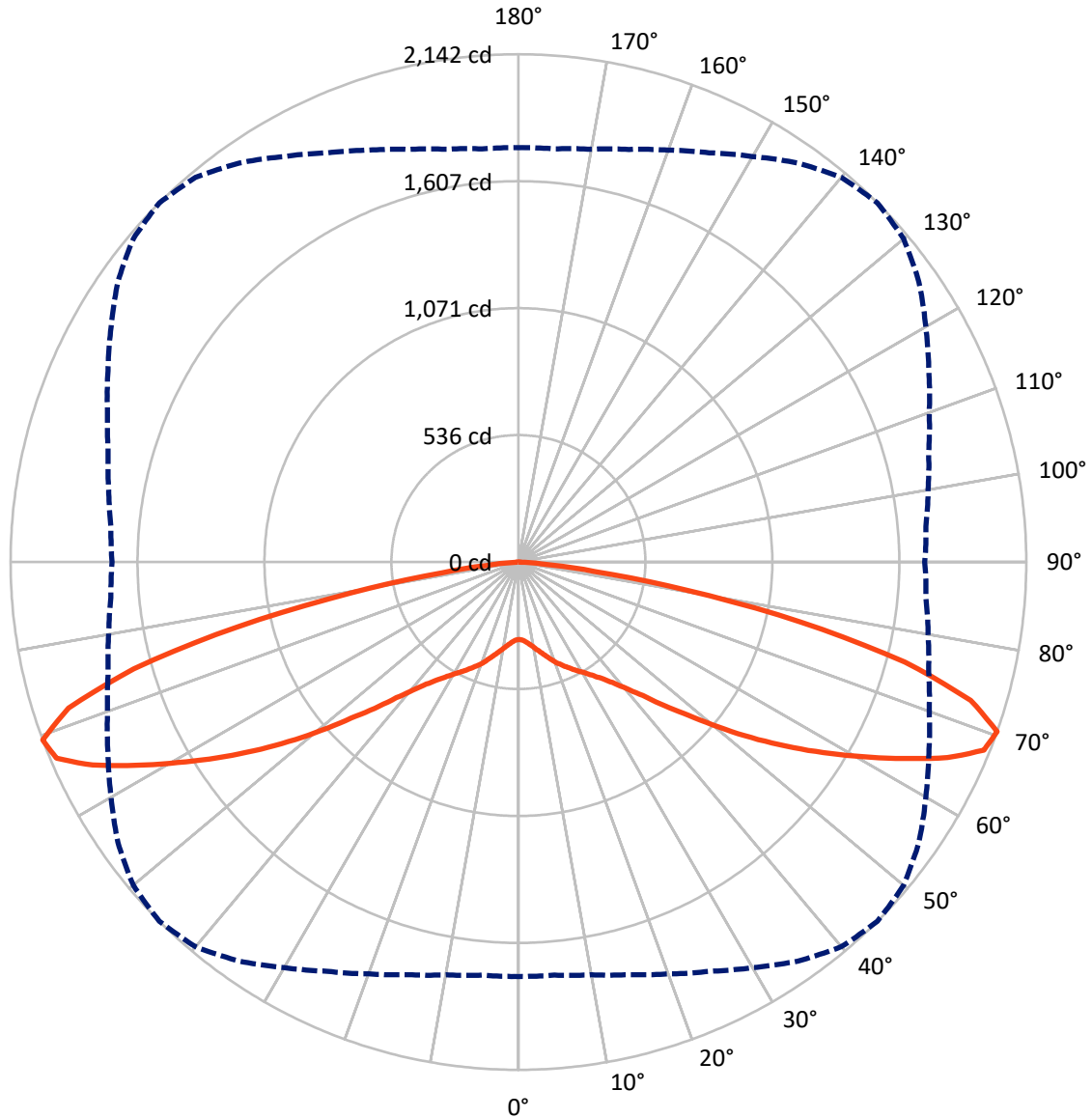
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.7 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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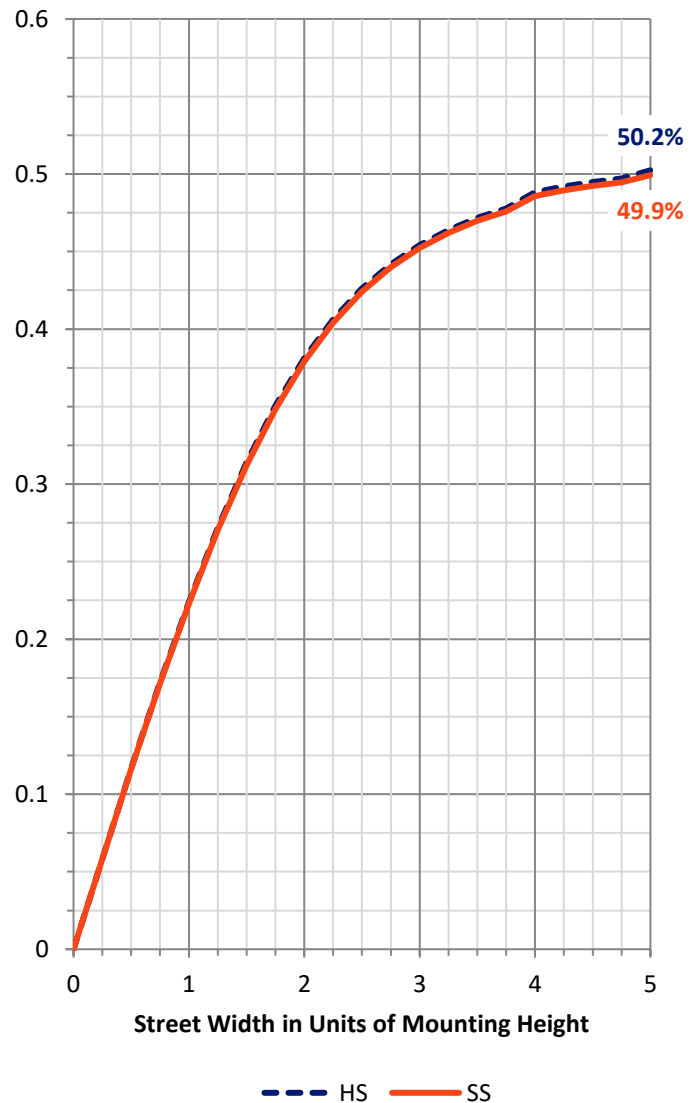
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2987.3	0.0	2987.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2987.3	0.0	2987.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	5974.7	0.0	5974.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.1	0.6
10°-20°	115.7	1.9
20°-30°	227.3	3.8
30°-40°	376.1	6.3
40°-50°	658.4	11.0
50°-60°	1174.4	19.7
60°-70°	1813.1	30.3
70°-80°	1435.2	24.0
80°-90°	141.2	2.4
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°-90°	5974.7	100.0
0°-180°	5974.7	100.0



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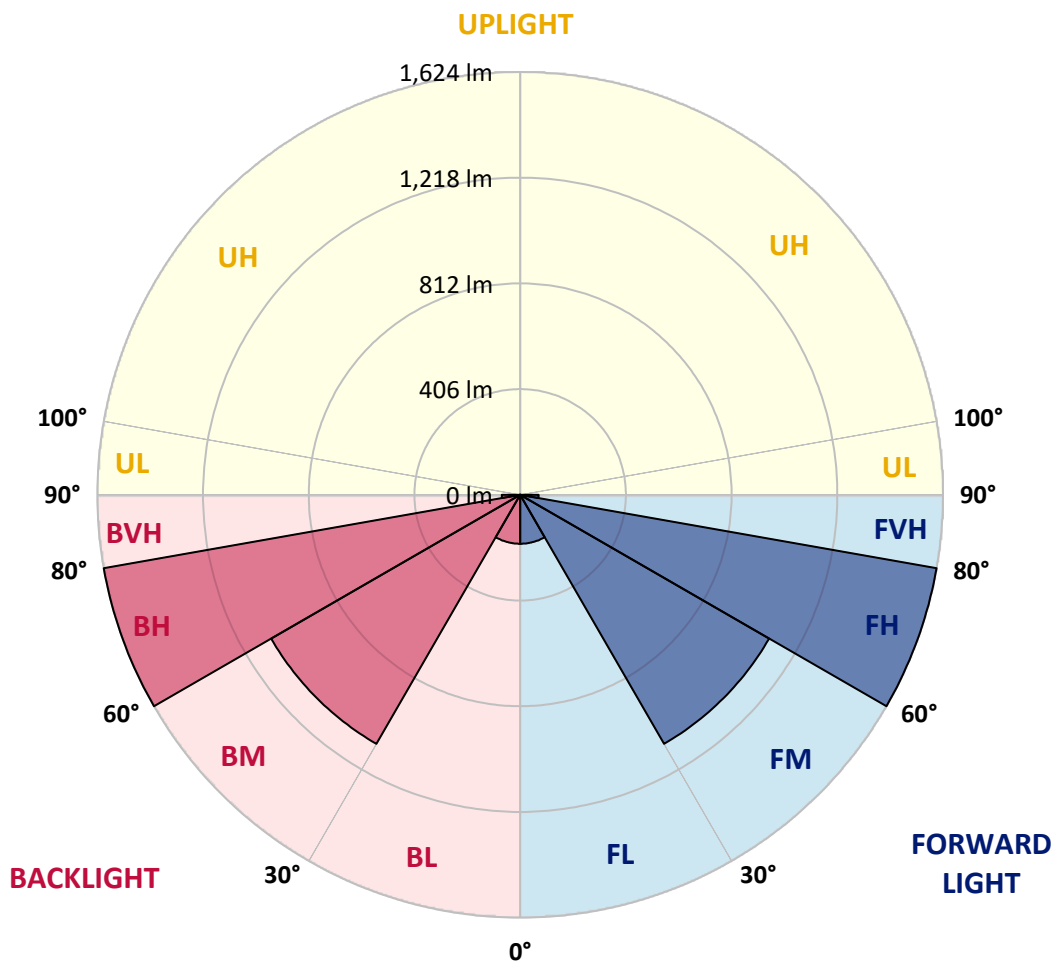
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	188.1	3.1			
FM (30°-60°)	1104.5	18.5			
FH (60°-80°)	1624.2	27.2			G1/1800
FVH (80°-90°)	70.6	1.2			G1/100
BL (0°-30°)	188.1	3.1	B1/500		
BM (30°-60°)	1104.5	18.5	B2/2500		
BH (60°-80°)	1624.2	27.2	B3/2500		G1/1800
BVH (80°-90°)	70.6	1.2			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°	326.7	326.7	326.7	326.7	326.7	326.7	326.7	326.7	326.7	326.7	326.7
2.5°	330.7	330.7	330.0	330.0	330.0	330.0	329.3	329.3	330.0	329.3	329.3
5°	338.7	339.3	339.3	338.7	338.7	338.7	338.7	338.7	339.3	338.7	338.7
7.5°	350.7	351.3	351.3	350.7	350.7	350.7	350.7	350.7	351.3	351.3	350.0
10°	365.3	366.0	366.0	365.3	365.3	366.0	366.0	366.0	366.7	366.7	366.0
12.5°	382.7	383.3	384.0	383.3	384.0	384.0	384.7	385.3	385.3	385.3	384.0
15°	402.7	404.7	403.3	403.3	404.0	404.7	404.7	406.7	406.0	405.3	404.7
17.5°	426.0	425.3	425.3	426.0	426.7	426.0	426.7	428.7	428.0	427.3	426.7
20°	448.0	448.0	448.0	447.3	448.7	448.7	449.3	450.0	450.0	451.3	449.3
22.5°	469.3	469.3	468.7	468.7	470.0	470.0	471.3	472.7	472.7	472.7	471.3
25°	489.3	489.3	490.0	489.3	490.0	490.7	492.0	493.3	494.0	494.0	494.0
27.5°	507.3	509.3	508.7	509.3	510.7	512.0	513.3	515.3	516.7	517.3	515.3
30°	530.0	530.0	529.3	530.0	531.3	533.3	536.0	539.3	539.3	540.0	540.0
32.5°	554.0	554.7	553.3	554.7	556.7	559.3	562.0	564.7	566.0	568.7	568.0
35°	585.3	583.3	584.0	586.0	587.3	590.0	593.3	598.0	600.7	602.0	600.7
37.5°	621.3	620.7	622.0	622.0	626.7	629.3	635.3	639.3	641.3	644.7	643.3
40°	666.7	669.3	670.0	672.0	674.7	680.0	686.7	693.3	697.3	700.0	700.7
42.5°	728.0	729.3	726.7	734.0	741.3	744.7	752.7	762.0	768.0	770.0	770.7
45°	803.3	803.3	807.3	812.0	821.3	828.0	836.7	852.0	857.3	864.7	864.7
47.5°	893.3	896.0	896.0	906.7	914.0	927.3	944.0	956.7	968.0	964.7	976.0
50°	997.3	999.3	1006.7	1012.7	1025.3	1040.7	1056.0	1074.7	1091.3	1093.3	1095.3
52.5°	1106.0	1108.7	1114.7	1128.7	1144.0	1161.3	1189.3	1205.3	1221.3	1230.0	1228.7
55°	1230.7	1229.3	1239.3	1250.0	1272.7	1296.0	1319.3	1342.0	1358.7	1370.7	1370.0
57.5°	1361.3	1366.0	1377.3	1390.7	1410.0	1430.7	1458.7	1481.3	1508.7	1516.0	1505.3
60°	1513.3	1508.7	1520.0	1540.7	1558.0	1584.7	1609.3	1638.7	1658.0	1666.7	1663.3
62.5°	1668.7	1664.7	1673.3	1700.0	1720.7	1740.0	1774.0	1806.0	1822.0	1825.3	1819.3
65°	1782.7	1784.0	1798.0	1821.3	1854.0	1883.3	1921.3	1960.0	1985.3	1989.3	1976.0
67.5°	1809.3	1812.0	1831.3	1861.3	1902.0	1950.7	2007.3	2064.7	2108.0	2117.3	2098.0
70°	1748.0	1749.3	1768.0	1802.0	1848.7	1904.7	1975.3	2054.7	2118.0	2142.0	2120.7
72.5°	1622.0	1627.3	1642.7	1671.3	1708.0	1763.3	1831.3	1902.0	1964.7	1995.3	1995.3
75°	1394.7	1406.7	1414.0	1423.3	1455.3	1500.0	1555.3	1611.3	1666.7	1684.0	1635.3
77.5°	995.3	975.3	980.0	1032.0	1024.7	1075.3	1136.7	1176.7	1226.0	1218.7	1148.7
80°	456.7	445.3	471.3	506.0	550.0	584.0	650.0	656.7	713.3	716.7	666.0
82.5°	91.3	96.0	114.7	141.3	176.0	214.0	248.7	278.0	316.7	324.0	300.7
85°	28.7	31.3	39.3	43.3	45.3	52.0	59.3	80.0	92.0	95.3	89.3
87.5°	6.0	9.3	15.3	17.3	18.0	17.3	17.3	16.7	13.3	10.7	12.7
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°	326.7	326.7	326.7	326.7	326.7	326.7	326.7	326.7
2.5°	328.7	328.7	329.3	329.3	329.3	328.7	328.0	328.7
5°	338.0	338.0	338.0	338.0	336.7	336.7	336.0	336.0
7.5°	350.0	349.3	349.3	348.7	348.0	348.0	347.3	348.0
10°	366.0	364.7	364.0	363.3	362.7	362.7	362.0	361.3
12.5°	383.3	382.7	382.0	380.7	380.0	378.7	378.7	378.7
15°	403.3	402.7	402.0	400.0	400.0	398.0	398.7	398.7
17.5°	425.3	424.0	422.0	421.3	420.7	418.7	418.7	418.7
20°	448.0	445.3	444.0	442.7	442.7	440.7	440.0	440.0
22.5°	470.0	467.3	464.7	463.3	462.0	461.3	460.0	459.3
25°	492.0	489.3	486.7	484.7	482.0	480.7	479.3	479.3
27.5°	514.0	511.3	507.3	504.7	502.0	499.3	498.0	498.7
30°	536.7	534.0	530.0	526.7	523.3	520.7	519.3	518.7
32.5°	565.3	562.0	557.3	554.0	548.0	545.3	544.0	544.7
35°	598.7	594.0	590.7	585.3	580.7	577.3	575.3	575.3
37.5°	641.3	637.3	634.0	628.7	622.0	618.0	615.3	617.3
40°	696.7	693.3	686.7	678.7	673.3	670.0	667.3	668.0
42.5°	767.3	760.7	754.7	750.0	742.0	737.3	730.0	732.7
45°	856.7	849.3	843.3	836.0	828.7	819.3	816.7	811.3
47.5°	964.7	959.3	946.0	939.3	930.0	916.7	910.0	904.7
50°	1084.0	1074.0	1064.7	1048.0	1037.3	1022.0	1016.0	1014.0
52.5°	1218.7	1202.0	1186.7	1171.3	1150.0	1135.3	1123.3	1126.0
55°	1352.0	1332.7	1310.7	1294.0	1277.3	1259.3	1246.7	1239.3
57.5°	1492.7	1471.3	1448.0	1424.0	1410.0	1388.7	1380.7	1376.7
60°	1637.3	1618.0	1594.7	1572.7	1553.3	1528.7	1515.3	1510.0
62.5°	1797.3	1770.7	1742.7	1715.3	1694.0	1676.0	1662.0	1652.7
65°	1944.7	1908.0	1879.3	1844.7	1821.3	1795.3	1778.0	1774.7
67.5°	2054.7	1998.0	1948.0	1903.3	1867.3	1835.3	1813.3	1804.7
70°	2062.0	1984.0	1910.0	1844.0	1791.3	1754.7	1725.3	1714.0
72.5°	1919.3	1822.7	1722.7	1658.0	1602.0	1551.3	1530.7	1526.0
75°	1561.3	1480.7	1397.3	1324.0	1285.3	1260.0	1242.7	1217.3
77.5°	1084.7	1010.7	966.0	884.0	869.3	848.7	831.3	814.7
80°	607.3	542.7	492.7	441.3	410.0	392.7	374.7	364.7
82.5°	272.7	224.0	178.0	138.0	114.0	90.0	67.3	71.3
85°	68.0	57.3	44.0	36.7	33.3	30.7	24.7	22.0
87.5°	12.7	12.0	10.7	10.7	11.3	9.3	5.3	4.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)