

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: P472209

Luminaire Tested: **CCW-VA-3-860-U-T4W**

Issue Date: 01/27/2021

Test Information

Test Method: LM-79-08
Report Number: P472209
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-VA-3-860-U-T4W
Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T4W DISTRIBUTION LENS
Light Source: 5700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5053.7 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

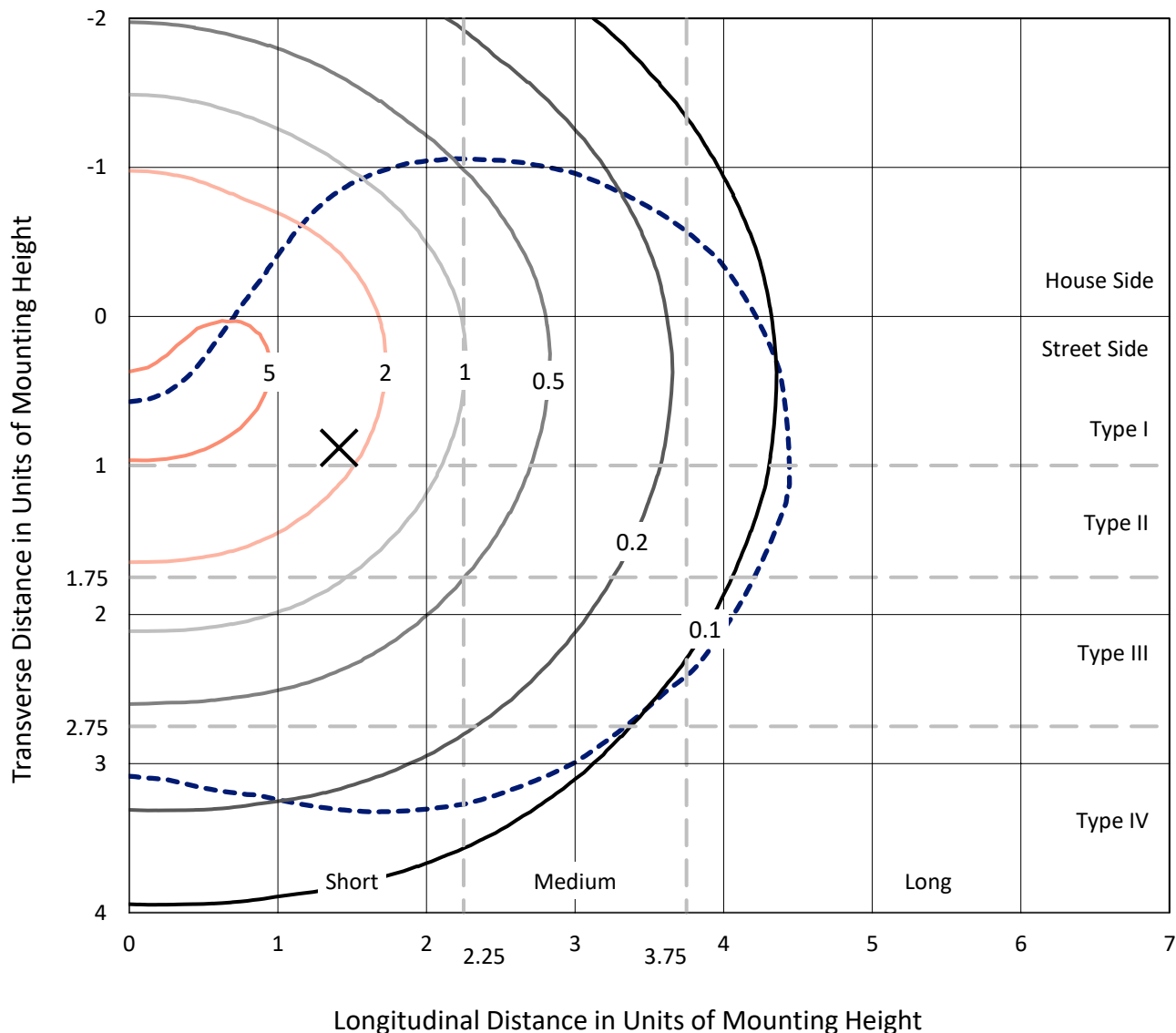
Input Watts (W): 46.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P472209
 CATALOG NUMBER: CCW-VA-3-860-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

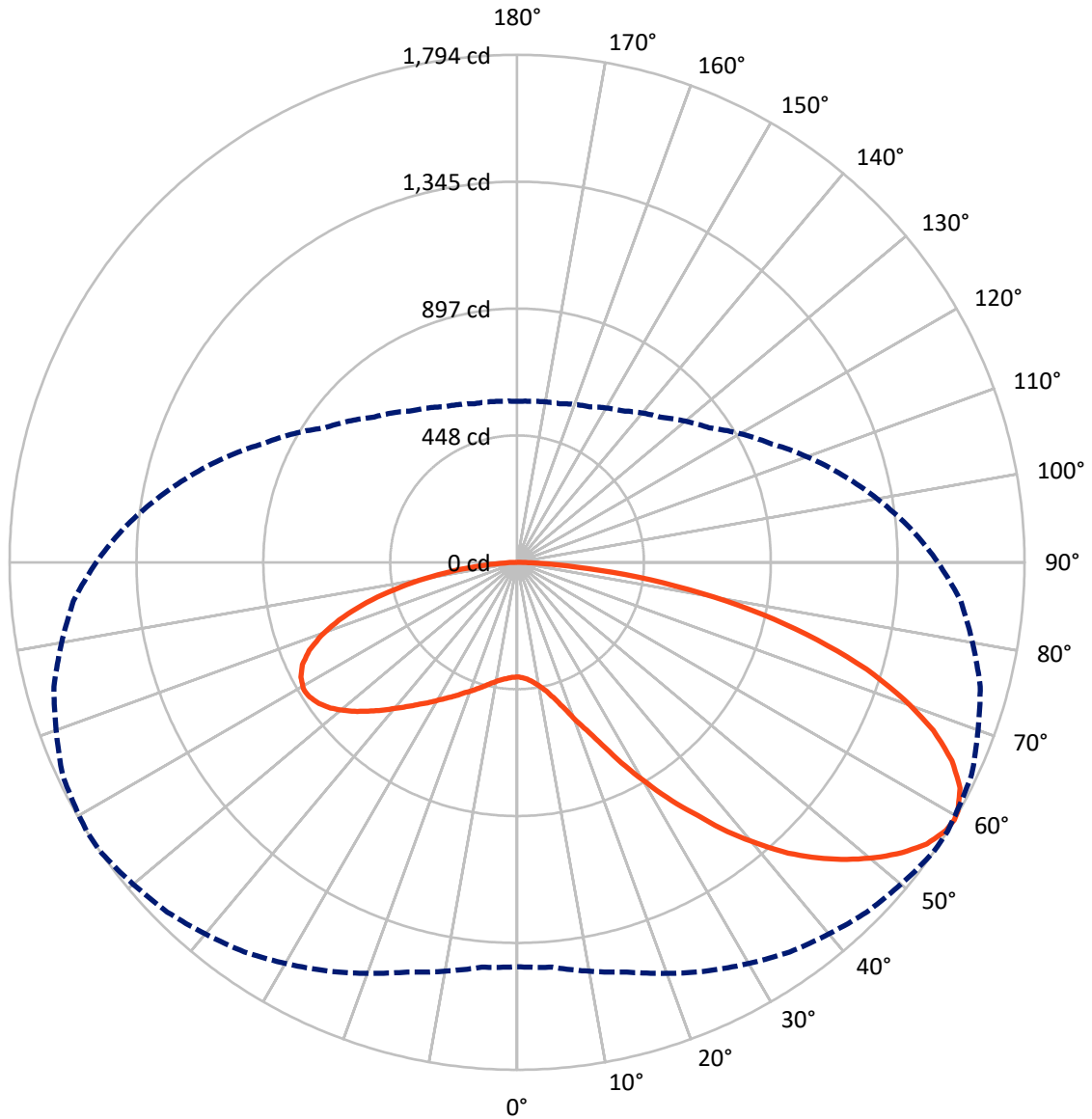
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.2 fc
 Type IV - Short - N/A

REPORT NUMBER: P472209
CATALOG NUMBER: CCW-VA-3-860-U-T4W

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 59-Deg Vertical

REPORT NUMBER: P472209
 CATALOG NUMBER: CCW-VA-3-860-U-T4W

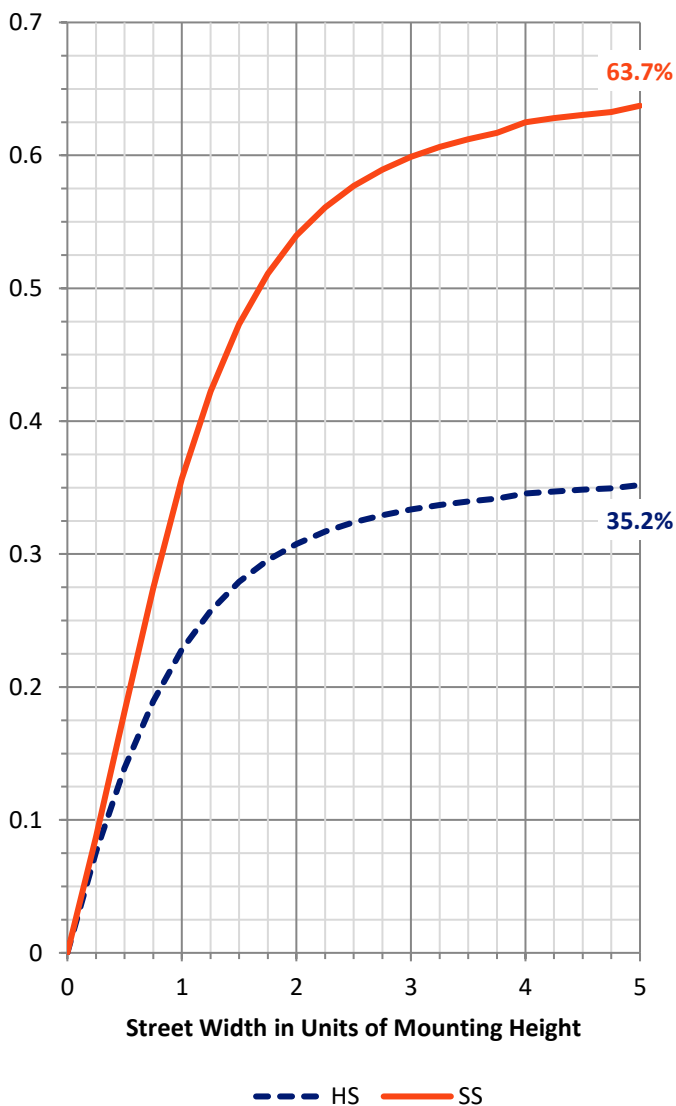
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1802.3	0.0	1802.3
	% Fixture	35.7	0.0	35.7
Street Side	Lumens	3251.4	0.0	3251.4
	% Fixture	64.3	0.0	64.3
Total	Lumens	5053.7	0.0	5053.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.2	0.8
10°-20°	137.1	2.7
20°-30°	289.3	5.7
30°-40°	532.5	10.5
40°-50°	830.0	16.4
50°-60°	1090.6	21.6
60°-70°	1142.8	22.6
70°-80°	792.3	15.7
80°-90°	199.0	3.9
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°	5053.7	100.0
0°-180°	5053.7	100.0



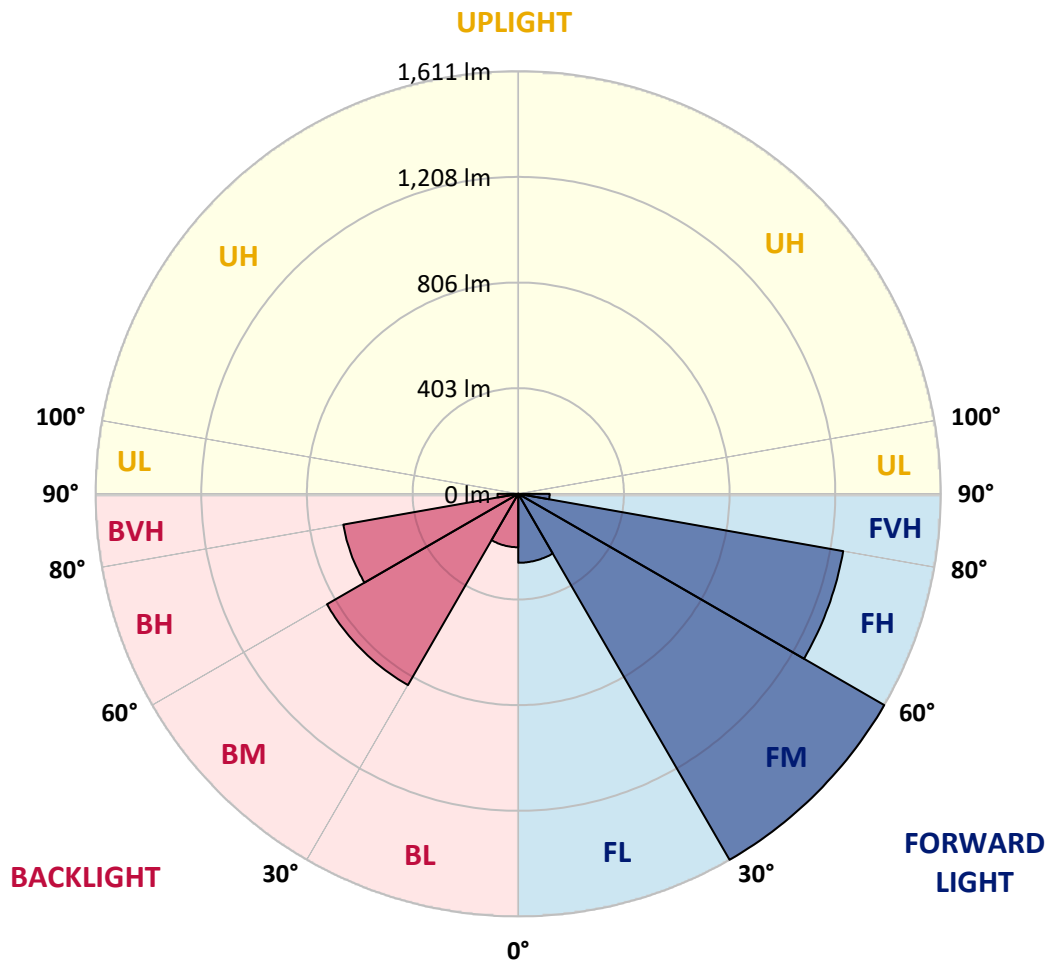
REPORT NUMBER: P472209
 CATALOG NUMBER: CCW-VA-3-860-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	262.9	5.2			
FM (30°-60°)	1611.0	31.9			
FH (60°-80°)	1257.9	24.9			G1/1800
FVH (80°-90°)	119.6	2.4			G2/225
BL (0°-30°)	203.7	4.0	B1/500		
BM (30°-60°)	842.0	16.7	B1/1000		
BH (60°-80°)	677.2	13.4	B2/1000		G2/1000
BVH (80°-90°)	79.4	1.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short





REPORT NUMBER: P472209

CATALOG NUMBER: CCW-VA-3-860-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	405.1	405.1	405.1	405.1	405.1	405.1	405.1	405.1	405.1	405.1	405.1
2.5°	410.8	410.8	410.8	409.7	409.7	409.7	408.5	408.5	408.5	407.4	406.3
5°	419.9	419.9	418.8	419.9	418.8	417.7	416.5	416.5	416.5	415.4	414.2
7.5°	432.4	433.6	432.4	433.6	432.4	431.3	429.0	429.0	427.9	425.6	423.3
10°	451.8	451.8	451.8	450.7	449.5	448.4	447.2	446.1	445.0	441.5	438.1
12.5°	475.7	475.7	475.7	473.4	473.4	471.1	470.0	468.9	466.6	462.0	457.5
15°	505.3	504.1	507.6	507.6	506.4	506.4	503.0	500.7	498.4	491.6	481.4
17.5°	545.1	544.0	547.4	549.7	549.7	550.8	545.1	542.8	534.9	525.8	512.1
20°	598.6	596.3	599.7	602.0	599.7	602.0	596.3	597.5	586.1	570.1	548.5
22.5°	656.6	656.6	660.0	660.0	661.2	663.5	656.6	653.2	644.1	621.4	594.0
25°	728.3	734.0	734.0	734.0	738.6	739.7	732.9	727.2	714.7	683.9	646.4
27.5°	816.0	814.8	813.7	820.5	820.5	822.8	818.2	816.0	801.2	763.6	706.7
30°	909.3	902.4	907.0	909.3	913.8	917.2	912.7	905.9	887.6	846.7	776.1
32.5°	994.6	999.2	1006.0	1008.3	1015.1	1016.2	1004.9	1004.9	986.7	934.3	861.5
35°	1091.4	1091.4	1109.6	1117.5	1117.5	1124.4	1107.3	1098.2	1085.7	1031.0	938.9
37.5°	1175.6	1177.8	1192.6	1210.8	1213.1	1223.4	1210.8	1207.4	1184.7	1128.9	1026.5
40°	1254.1	1256.4	1274.6	1296.2	1308.7	1324.6	1312.1	1306.4	1282.5	1218.8	1114.1
42.5°	1315.5	1320.1	1342.9	1374.7	1395.2	1414.5	1408.9	1405.4	1372.4	1305.3	1194.9
45°	1362.2	1370.2	1402.0	1439.6	1468.0	1496.5	1497.6	1490.8	1460.1	1385.0	1273.4
47.5°	1399.8	1408.9	1444.1	1491.9	1535.2	1570.5	1577.3	1569.3	1540.9	1462.3	1344.0
50°	1430.5	1435.0	1474.9	1536.3	1589.8	1634.2	1647.8	1641.0	1616.0	1527.2	1405.4
52.5°	1446.4	1453.2	1498.8	1569.3	1634.2	1687.7	1708.2	1704.7	1675.2	1586.4	1460.1
55°	1454.4	1461.2	1514.7	1595.5	1668.3	1730.9	1756.0	1757.1	1728.6	1639.9	1511.3
57.5°	1445.3	1454.4	1512.4	1602.3	1683.1	1750.3	1789.0	1787.8	1765.1	1680.8	1554.5
59°	1429.3	1436.2	1498.8	1593.2	1680.8	1748.0	1792.4	1793.5	1773.0	1694.5	1573.9
60°	1411.1	1419.1	1482.8	1581.8	1671.7	1740.0	1786.7	1789.0	1771.9	1697.9	1581.8
62.5°	1348.5	1358.8	1429.3	1535.2	1633.0	1697.9	1753.7	1757.1	1748.0	1688.8	1587.5
65°	1260.9	1270.0	1346.3	1458.9	1561.4	1628.5	1680.8	1688.8	1687.7	1647.8	1564.8
67.5°	1153.9	1155.1	1226.8	1349.7	1456.7	1522.7	1572.7	1586.4	1596.6	1570.5	1497.6
70°	1025.3	1024.2	1093.6	1215.4	1322.4	1391.8	1441.9	1451.0	1477.1	1456.7	1397.5
72.5°	866.0	879.7	944.6	1047.0	1152.8	1230.2	1274.6	1291.6	1306.4	1311.0	1262.1
75°	715.8	730.6	781.8	877.4	968.4	1040.1	1087.9	1095.9	1123.2	1130.0	1084.5
77.5°	572.4	573.6	611.1	687.4	770.4	829.6	868.3	888.8	903.6	917.2	869.4
80°	401.7	407.4	433.6	488.2	553.1	615.7	647.5	661.2	671.4	680.5	664.6
82.5°	251.5	253.8	270.8	303.8	348.2	383.5	416.5	427.9	430.2	450.7	448.4
85°	119.5	120.6	132.0	147.9	167.3	195.7	208.3	208.3	224.2	239.0	239.0
87.5°	15.9	15.9	19.3	21.6	27.3	35.3	48.9	50.1	59.2	66.0	71.7
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: P472209
 CATALOG NUMBER: CCW-VA-3-860-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	405.1	405.1	405.1	405.1	405.1	405.1	405.1	405.1	405.1	405.1	405.1
2.5°	406.3	406.3	406.3	406.3	406.3	405.1	406.3	406.3	406.3	406.3	406.3
5°	414.2	413.1	412.0	410.8	410.8	409.7	409.7	409.7	409.7	409.7	409.7
7.5°	422.2	421.1	419.9	417.7	416.5	415.4	415.4	414.2	414.2	414.2	414.2
10°	435.9	434.7	430.2	426.8	424.5	423.3	422.2	421.1	419.9	419.9	419.9
12.5°	454.1	451.8	443.8	439.3	435.9	433.6	431.3	430.2	429.0	427.9	427.9
15°	476.8	471.1	460.9	454.1	449.5	446.1	442.7	440.4	439.3	438.1	438.1
17.5°	504.1	497.3	483.7	471.1	463.2	457.5	452.9	449.5	448.4	448.4	448.4
20°	538.3	526.9	507.6	490.5	478.0	470.0	463.2	459.8	458.6	457.5	456.3
22.5°	578.1	563.3	534.9	508.7	492.8	481.4	473.4	468.9	465.4	464.3	464.3
25°	623.6	602.0	564.5	532.6	511.0	495.0	484.8	479.1	473.4	471.1	471.1
27.5°	678.3	649.8	599.7	557.6	528.0	508.7	497.3	489.3	483.7	479.1	476.8
30°	737.4	705.6	638.4	584.9	547.4	525.8	512.1	503.0	495.0	487.1	485.9
32.5°	812.5	767.0	685.1	615.7	570.1	542.8	526.9	515.5	505.3	497.3	495.0
35°	888.8	834.2	734.0	647.5	591.8	558.8	539.4	526.9	516.7	507.6	506.4
37.5°	967.3	909.3	787.5	685.1	616.8	577.0	553.1	539.4	526.9	517.8	516.7
40°	1049.2	981.0	842.1	723.8	643.0	595.2	567.9	550.8	537.1	529.2	528.0
42.5°	1126.6	1052.7	901.3	769.3	673.7	614.5	582.7	564.5	547.4	539.4	538.3
45°	1200.6	1120.9	960.5	811.4	704.4	635.0	597.5	575.8	557.6	549.7	548.5
47.5°	1267.7	1188.1	1015.1	856.9	736.3	657.8	613.4	587.2	566.7	558.8	558.8
50°	1328.1	1245.0	1068.6	899.0	765.9	680.5	627.0	597.5	577.0	569.0	567.9
52.5°	1385.0	1295.1	1115.3	935.4	794.3	701.0	640.7	605.4	583.8	574.7	573.6
55°	1430.5	1340.6	1153.9	965.0	813.7	714.7	649.8	610.0	586.1	578.1	577.0
57.5°	1470.3	1378.1	1181.3	985.5	826.2	722.6	654.4	610.0	584.9	575.8	574.7
59°	1487.4	1394.1	1190.4	991.2	828.5	723.8	653.2	606.6	580.4	571.3	569.0
60°	1496.5	1400.9	1193.8	992.3	827.3	721.5	652.1	603.1	575.8	565.6	565.6
62.5°	1505.6	1406.6	1189.2	983.2	814.8	709.0	640.7	589.5	558.8	547.4	547.4
65°	1486.2	1386.1	1163.0	958.2	789.8	687.4	619.1	566.7	532.6	521.2	521.2
67.5°	1429.3	1336.0	1115.3	911.5	748.8	649.8	583.8	530.3	498.4	485.9	482.5
70°	1332.6	1254.1	1040.1	844.4	693.0	602.0	539.4	488.2	455.2	442.7	438.1
72.5°	1202.9	1125.5	940.0	762.5	619.1	539.4	484.8	435.9	399.4	386.9	388.1
75°	1024.2	969.6	810.3	658.9	533.7	459.8	414.2	373.3	342.5	332.3	333.4
77.5°	830.7	785.2	656.6	537.1	435.9	379.0	340.3	307.3	286.8	281.1	277.7
80°	636.1	591.8	492.8	400.6	331.2	291.3	265.2	242.4	226.5	218.5	220.8
82.5°	426.8	399.4	326.6	265.2	225.3	196.9	187.8	173.0	167.3	162.7	166.1
85°	229.9	206.0	170.7	142.3	124.0	116.1	118.4	117.2	112.7	111.5	114.9
87.5°	75.1	64.9	50.1	42.1	43.2	38.7	38.7	36.4	33.0	31.9	34.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)