

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: P472251

Luminaire Tested: **CCW-VA-3-840-U-T2**

Issue Date: 01/27/2021

Test Information

Test Method: LM-79-08
Report Number: P472251
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-VA-3-840-U-T2
Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T2 DISTRIBUTION LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4230.8 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

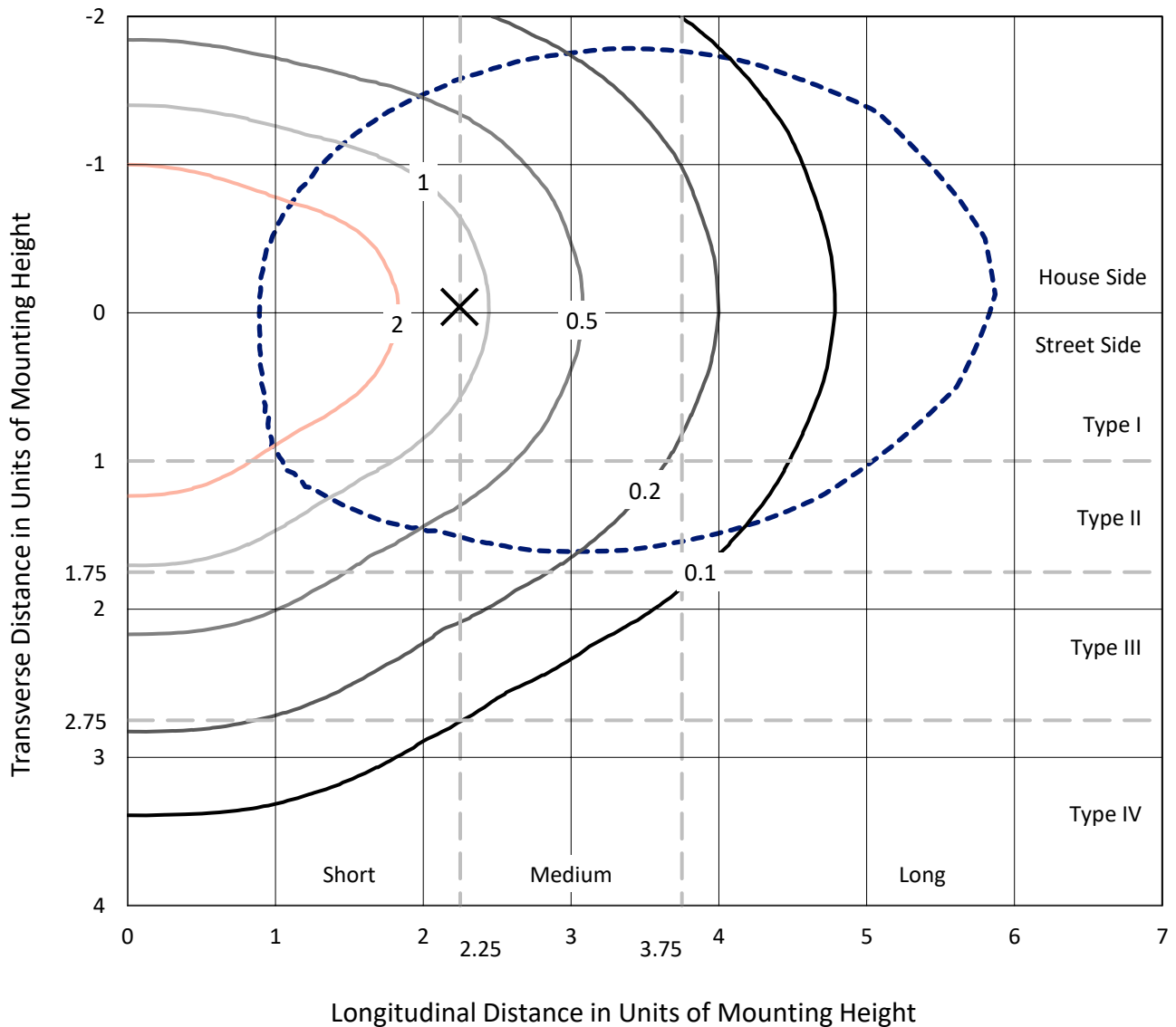
Input Watts (W): 48.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P472251
 CATALOG NUMBER: CCW-VA-3-840-U-T2

Iso-Footcandle Lines of Horizontal Illumination

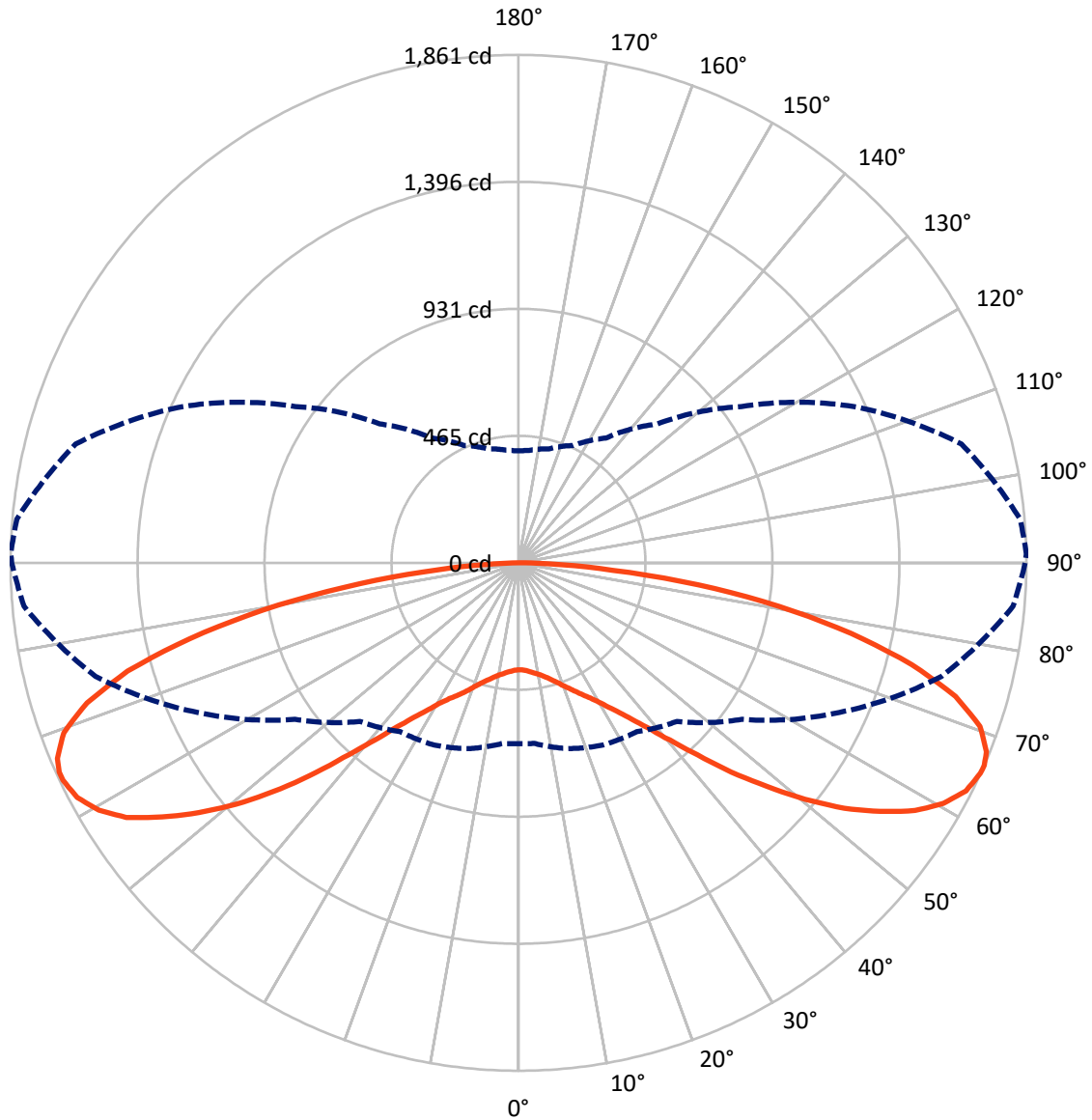
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.2 fc
 Type II - Short - N/A

REPORT NUMBER: P472251
CATALOG NUMBER: CCW-VA-3-840-U-T2

Luminous Intensity Polar Plot



— Vertical Plane Through 91-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P472251
 CATALOG NUMBER: CCW-VA-3-840-U-T2

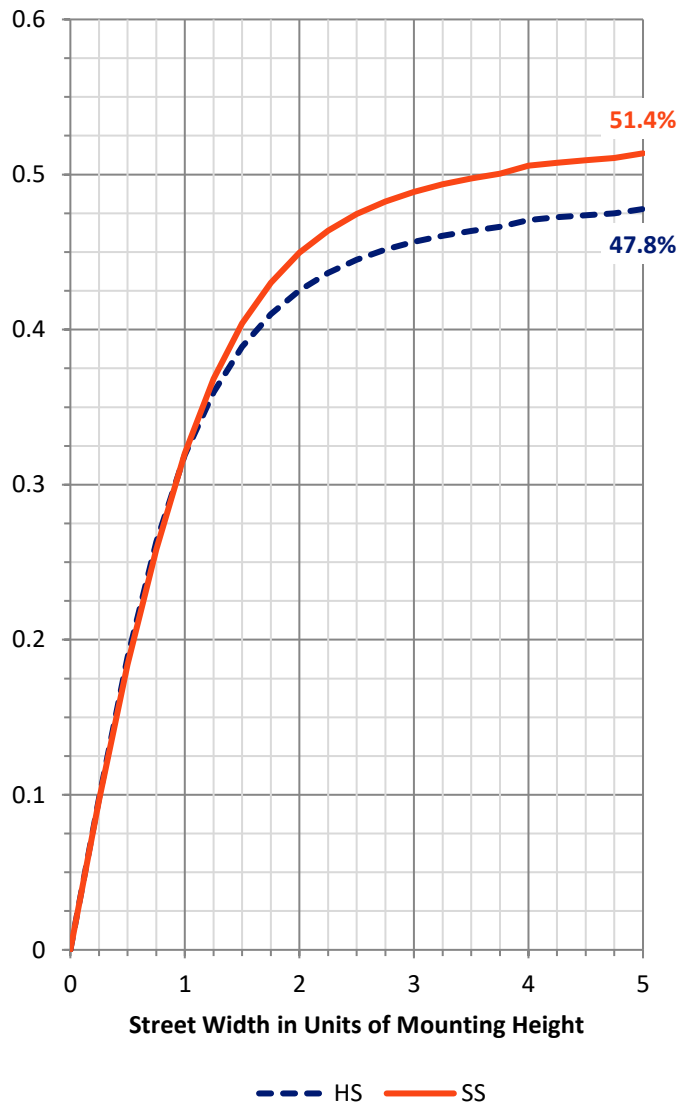
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2042.0	0.0	2042.0
	% Fixture	48.3	0.0	48.3
Street Side	Lumens	2188.8	0.0	2188.8
	% Fixture	51.7	0.0	51.7
Total	Lumens	4230.8	0.0	4230.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.6	0.9
10°-20°	126.3	3.0
20°-30°	244.3	5.8
30°-40°	400.8	9.5
40°-50°	634.8	15.0
50°-60°	875.4	20.7
60°-70°	983.0	23.2
70°-80°	734.7	17.4
80°-90°	193.0	4.6
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°	4230.8	100.0
0°-180°	4230.8	100.0

Coefficient of Utilization



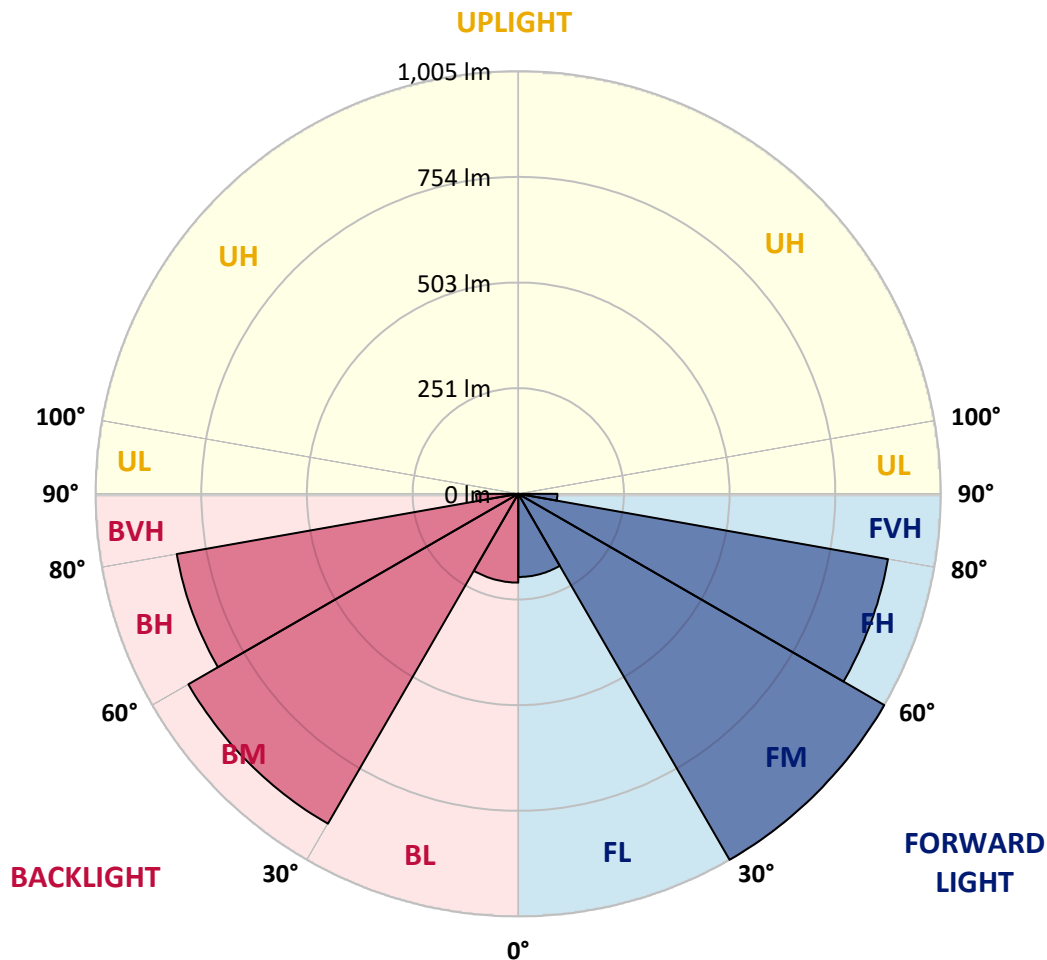
REPORT NUMBER: P472251
 CATALOG NUMBER: CCW-VA-3-840-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	197.8	4.7			
FM (30°-60°)	1005.1	23.8			
FH (60°-80°)	892.9	21.1			G1/1800
FVH (80°-90°)	93.0	2.2			G1/100
BL (0°-30°)	211.3	5.0	B1/500		
BM (30°-60°)	905.9	21.4	B1/1000		
BH (60°-80°)	824.8	19.5	B2/1000		G2/1000
BVH (80°-90°)	100.1	2.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





REPORT NUMBER: P472251
 CATALOG NUMBER: CCW-VA-3-840-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0
2.5°	393.5	393.5	393.5	393.5	395.0	395.0	395.0	395.0	395.0	393.5	393.5
5°	396.5	396.5	396.5	396.5	398.0	398.0	398.0	398.0	399.5	399.5	399.5
7.5°	399.5	399.5	401.0	401.0	402.5	402.5	404.0	404.0	405.5	407.0	407.0
10°	405.5	405.5	407.0	407.0	410.0	411.5	413.0	413.0	416.0	416.0	416.0
12.5°	413.0	414.5	416.0	417.5	420.5	422.0	423.5	425.0	426.4	427.9	427.9
15°	425.0	423.5	426.4	429.4	430.9	433.9	435.4	436.9	439.9	442.9	442.9
17.5°	433.9	435.4	436.9	439.9	442.9	447.4	450.4	453.4	456.4	459.4	459.4
20°	445.9	444.4	450.4	454.9	457.9	463.9	468.3	474.3	477.3	480.3	481.8
22.5°	456.4	457.9	460.9	466.8	472.8	481.8	490.8	495.3	499.8	502.8	507.2
25°	469.8	471.3	475.8	481.8	490.8	501.3	511.7	517.7	522.2	528.2	532.7
27.5°	483.3	483.3	490.8	499.8	510.2	523.7	535.7	541.7	549.1	556.6	559.6
30°	498.3	498.3	505.8	517.7	532.7	547.6	558.1	570.1	580.6	588.0	594.0
32.5°	520.7	520.7	529.7	541.7	558.1	576.1	591.0	603.0	616.5	629.9	641.9
35°	546.2	547.6	559.6	574.6	594.0	616.5	629.9	646.4	661.4	683.8	695.8
37.5°	586.6	588.0	601.5	621.0	640.4	664.4	686.8	706.3	728.7	754.1	763.1
40°	646.4	650.9	664.4	673.3	691.3	709.2	742.2	775.1	814.0	848.4	854.4
42.5°	754.1	749.6	740.7	737.7	742.2	761.6	797.5	848.4	917.2	960.6	960.6
45°	796.0	796.0	797.5	794.5	791.5	805.0	846.9	927.7	1025.0	1084.8	1096.8
47.5°	803.5	805.0	818.5	830.5	833.4	848.4	899.3	1005.5	1135.7	1224.0	1231.5
50°	803.5	806.5	824.5	845.4	860.4	881.3	944.2	1074.3	1244.9	1346.7	1366.1
52.5°	800.5	803.5	823.0	848.4	872.3	902.3	983.1	1146.2	1342.2	1479.8	1488.8
55°	793.0	796.0	820.0	846.9	873.8	914.2	1014.5	1207.5	1436.5	1590.6	1607.0
57.5°	784.1	788.6	814.0	842.4	867.9	917.2	1035.4	1255.4	1512.8	1689.3	1719.3
60°	766.1	773.6	802.0	830.5	854.4	906.8	1045.9	1292.8	1569.6	1761.2	1791.1
62.5°	730.2	737.7	769.1	800.5	824.5	881.3	1039.9	1310.8	1602.5	1806.0	1837.5
65°	685.3	688.3	722.7	755.6	779.6	839.4	1014.5	1307.8	1610.0	1821.0	1856.9
66°	662.9	664.4	704.8	736.2	755.6	821.5	999.5	1297.3	1605.5	1819.5	1856.9
67.5°	622.5	629.9	664.4	697.3	719.7	781.1	963.6	1273.4	1587.6	1804.5	1843.5
70°	552.1	558.1	586.6	619.5	643.4	701.8	885.8	1203.0	1521.7	1743.2	1788.1
72.5°	475.8	480.3	510.2	534.2	549.1	612.0	791.5	1087.8	1406.5	1628.0	1671.4
75°	395.0	398.0	425.0	441.4	454.9	510.2	665.9	939.7	1225.5	1440.9	1497.8
77.5°	311.2	312.7	335.2	350.1	350.1	398.0	528.2	761.6	1005.5	1204.5	1246.4
80°	228.9	227.4	240.9	248.4	252.9	284.3	380.1	559.6	766.1	921.7	962.1
82.5°	149.6	148.1	157.1	160.1	160.1	179.6	239.4	354.6	502.8	625.5	649.4
85°	79.3	82.3	80.8	80.8	80.8	88.3	119.7	185.5	267.8	335.2	351.6
87.5°	13.5	13.5	13.5	15.0	18.0	23.9	31.4	52.4	76.3	103.2	116.7
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: P472251
 CATALOG NUMBER: CCW-VA-3-840-U-T2

CANDELA DISTRIBUTION (continued):

	91°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0
2.5°	393.5	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0
5°	399.5	399.5	399.5	401.0	401.0	401.0	401.0	401.0	401.0	401.0	401.0
7.5°	407.0	407.0	408.5	408.5	408.5	410.0	410.0	408.5	408.5	408.5	408.5
10°	416.0	416.0	417.5	419.0	419.0	420.5	420.5	419.0	419.0	417.5	417.5
12.5°	427.9	429.4	430.9	432.4	433.9	433.9	432.4	430.9	429.4	427.9	427.9
15°	442.9	444.4	445.9	448.9	448.9	448.9	447.4	445.9	442.9	441.4	442.9
17.5°	460.9	462.4	465.4	466.8	468.3	466.8	466.8	465.4	465.4	463.9	463.9
20°	483.3	484.8	489.3	490.8	490.8	492.3	496.8	499.8	504.3	505.8	505.8
22.5°	505.8	508.7	513.2	519.2	522.2	528.2	529.7	532.7	531.2	526.7	526.7
25°	532.7	535.7	544.7	552.1	558.1	561.1	558.1	553.6	546.2	540.2	538.7
27.5°	561.1	565.6	579.1	589.5	592.5	589.5	577.6	567.1	558.1	550.6	547.6
30°	597.0	604.5	619.5	625.5	624.0	612.0	594.0	580.6	567.1	558.1	556.6
32.5°	641.9	649.4	662.9	664.4	655.4	632.9	609.0	591.0	574.6	564.1	562.6
35°	695.8	703.3	710.7	706.3	680.8	652.4	622.5	597.0	580.6	568.6	568.6
37.5°	764.6	769.1	769.1	746.7	707.8	670.3	632.9	603.0	585.1	573.1	571.6
40°	854.4	852.9	831.9	788.6	737.7	686.8	640.4	609.0	586.6	574.6	573.1
42.5°	962.1	951.7	906.8	836.4	766.1	701.8	649.4	610.5	585.1	573.1	571.6
45°	1093.8	1075.8	995.0	891.8	796.0	715.2	653.9	609.0	580.6	567.1	565.6
47.5°	1224.0	1213.5	1102.8	950.2	826.0	730.2	656.9	604.5	571.6	552.1	552.1
50°	1361.6	1336.2	1210.5	1020.5	857.4	740.7	656.9	597.0	556.6	535.7	532.7
52.5°	1494.8	1469.4	1319.7	1090.8	891.8	751.1	653.9	586.6	543.2	520.7	517.7
55°	1608.5	1587.6	1426.0	1170.1	927.7	758.6	649.4	574.6	529.7	508.7	505.8
57.5°	1713.3	1692.3	1518.8	1237.4	962.1	763.1	638.9	559.6	513.2	492.3	490.8
60°	1789.6	1773.1	1598.1	1300.3	990.6	763.1	624.0	541.7	495.3	474.3	472.8
62.5°	1840.5	1824.0	1654.9	1342.2	1008.5	752.6	601.5	517.7	472.8	453.4	448.9
65°	1859.9	1844.9	1680.4	1358.6	1005.5	731.7	571.6	487.8	444.4	425.0	422.0
66°	1861.4	1844.9	1680.4	1355.7	998.0	719.7	558.1	474.3	432.4	413.0	410.0
67.5°	1849.4	1834.5	1669.9	1340.7	977.1	697.3	531.2	451.9	410.0	390.5	389.0
70°	1794.1	1782.1	1613.0	1283.8	927.7	647.9	486.3	408.5	368.1	354.6	350.1
72.5°	1674.4	1660.9	1499.3	1177.6	846.9	580.6	429.4	357.6	324.7	308.2	306.7
75°	1488.8	1482.8	1325.7	1036.9	730.2	499.8	363.6	302.3	275.3	263.4	263.4
77.5°	1246.4	1234.5	1101.3	857.4	600.0	404.0	291.8	245.4	224.4	214.0	215.5
80°	969.6	960.6	848.4	643.4	453.4	303.8	218.5	187.0	172.1	166.1	163.1
82.5°	664.4	640.4	565.6	426.4	294.8	205.0	151.1	130.2	122.7	121.2	119.7
85°	345.6	354.6	297.8	225.9	160.1	113.7	91.3	83.8	80.8	82.3	82.3
87.5°	113.7	116.7	89.8	68.8	52.4	40.4	34.4	32.9	28.4	31.4	32.9
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)