

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: P472180

Luminaire Tested: **CCW-VA-4-827-U-T4W**

Issue Date: 01/27/2021

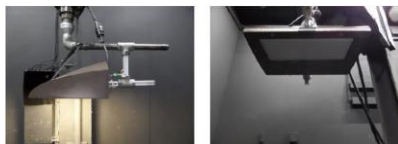
Test Information

Test Method: LM-79-08
Report Number: P472180
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-VA-4-827-U-T4W
Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T4W DISTRIBUTION LENS
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5556.1 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

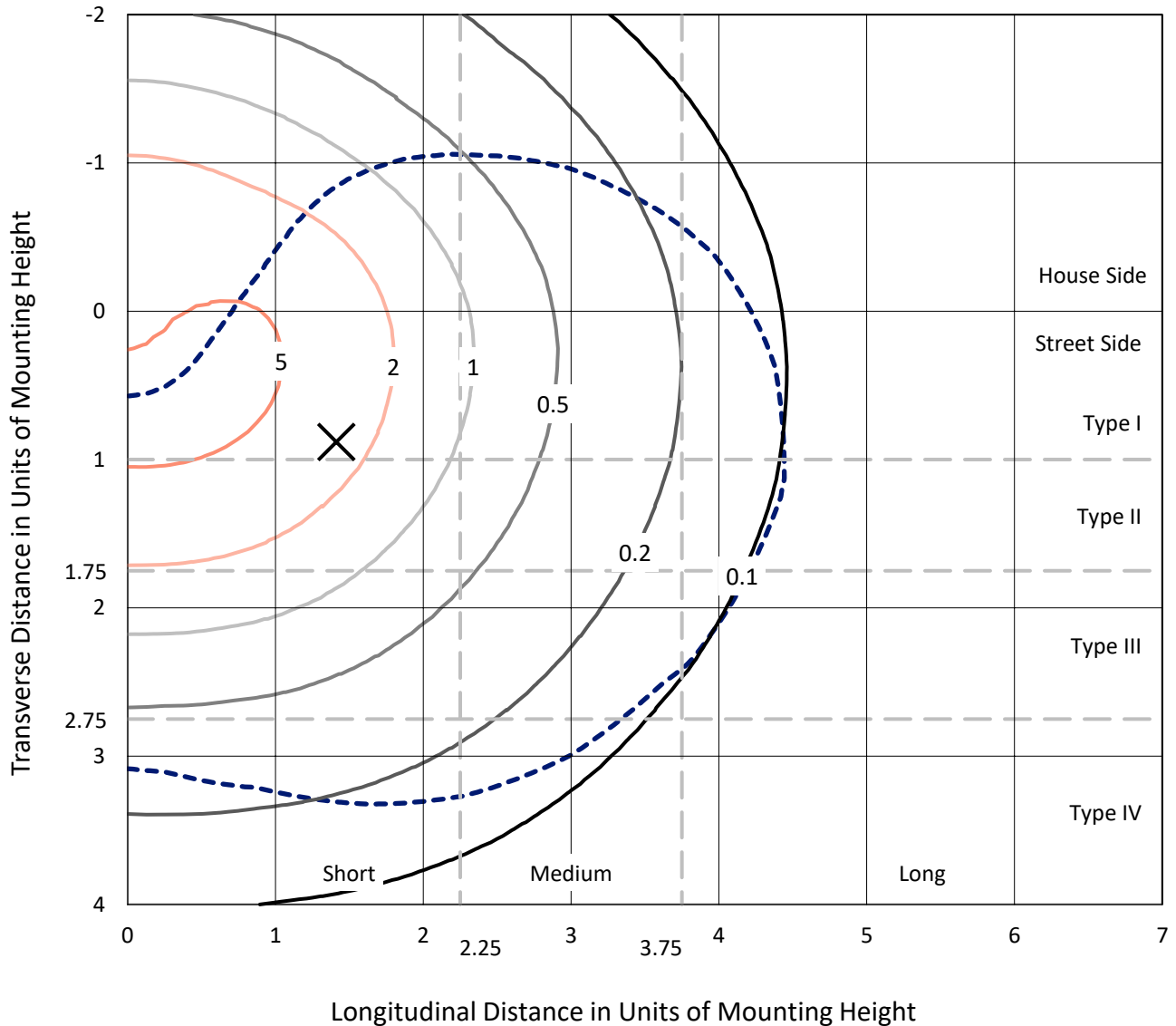
Input Watts (W): 57.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P472180
 CATALOG NUMBER: CCW-VA-4-827-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

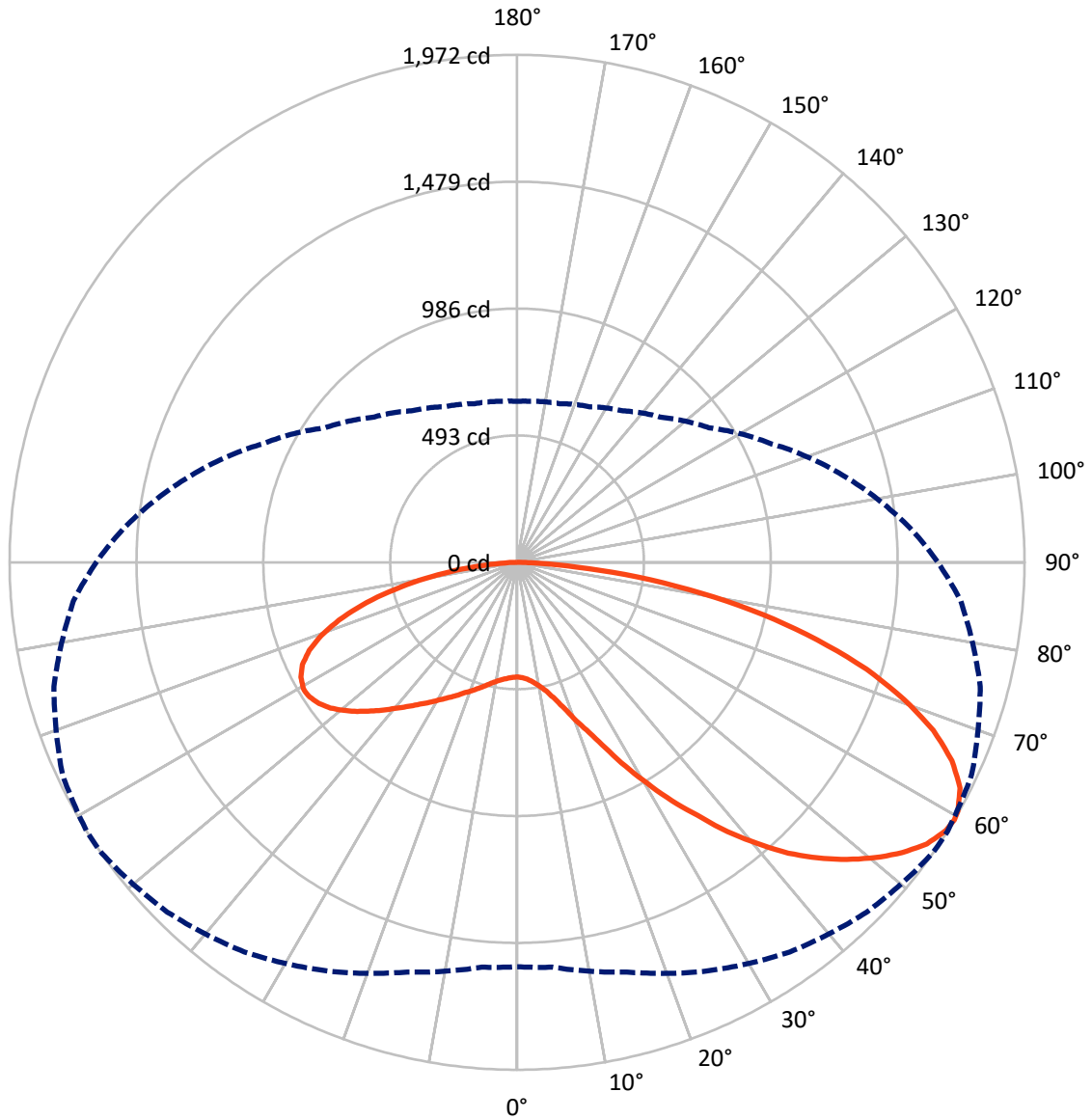
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.8 fc
 Type IV - Short - N/A

REPORT NUMBER: P472180
CATALOG NUMBER: CCW-VA-4-827-U-T4W

Luminous Intensity Polar Plot



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

REPORT NUMBER: P472180
 CATALOG NUMBER: CCW-VA-4-827-U-T4W

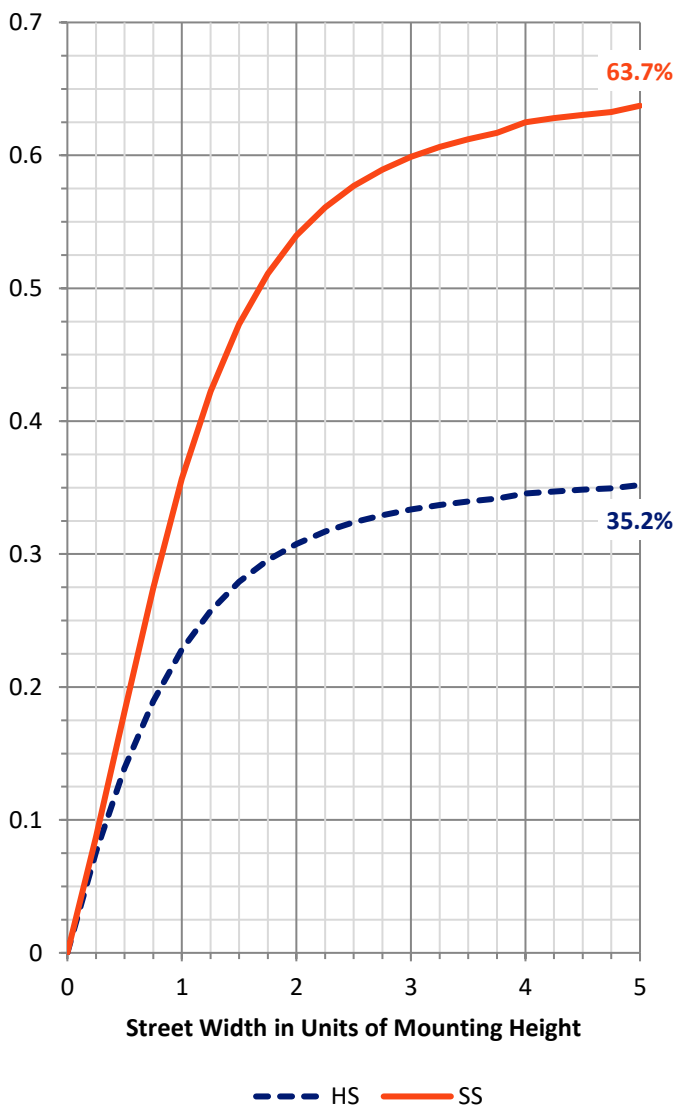
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1981.5	0.0	1981.5
	% Fixture	35.7	0.0	35.7
Street Side	Lumens	3574.6	0.0	3574.6
	% Fixture	64.3	0.0	64.3
Total	Lumens	5556.1	0.0	5556.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.2	0.8
10°-20°	150.7	2.7
20°-30°	318.1	5.7
30°-40°	585.4	10.5
40°-50°	912.5	16.4
50°-60°	1199.0	21.6
60°-70°	1256.4	22.6
70°-80°	871.1	15.7
80°-90°	218.7	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°	5556.1	100.0
0°-180°	5556.1	100.0

Coefficient of Utilization



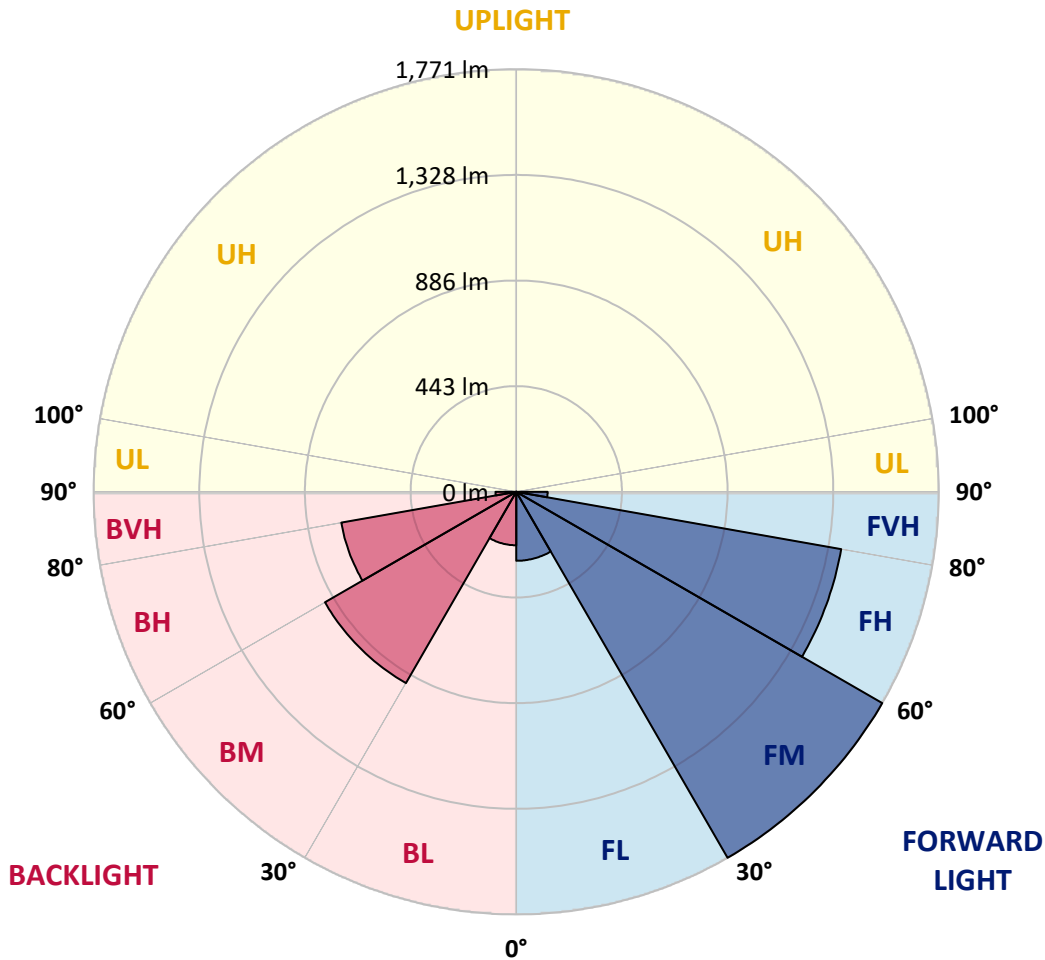
REPORT NUMBER: P472180
 CATALOG NUMBER: CCW-VA-4-827-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	289.0	5.2			
FM (30°-60°)	1771.2	31.9			
FH (60°-80°)	1382.9	24.9			G1/1800
FVH (80°-90°)	131.4	2.4			G2/225
BL (0°-30°)	224.0	4.0	B1/500		
BM (30°-60°)	925.7	16.7	B1/1000		
BH (60°-80°)	744.5	13.4	B2/1000		G2/1000
BVH (80°-90°)	87.3	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: P472180

CATALOG NUMBER: CCW-VA-4-827-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	445.4	445.4	445.4	445.4	445.4	445.4	445.4	445.4	445.4	445.4	445.4
2.5°	451.7	451.7	451.7	450.4	450.4	450.4	449.2	449.2	449.2	447.9	446.7
5°	461.7	461.7	460.4	461.7	460.4	459.2	457.9	457.9	457.9	456.7	455.4
7.5°	475.4	476.7	475.4	476.7	475.4	474.2	471.7	471.7	470.4	467.9	465.4
10°	496.7	496.7	496.7	495.5	494.2	493.0	491.7	490.4	489.2	485.4	481.7
12.5°	523.0	523.0	523.0	520.5	520.5	518.0	516.7	515.5	513.0	508.0	503.0
15°	555.5	554.3	558.0	558.0	556.8	556.8	553.0	550.5	548.0	540.5	529.2
17.5°	599.3	598.0	601.8	604.3	604.3	605.6	599.3	596.8	588.0	578.0	563.0
20°	658.1	655.6	659.4	661.9	659.4	661.9	655.6	656.9	644.3	626.8	603.1
22.5°	721.9	721.9	725.7	725.7	726.9	729.4	721.9	718.2	708.1	683.1	653.1
25°	800.7	807.0	807.0	807.0	812.0	813.2	805.7	799.5	785.7	751.9	710.6
27.5°	897.1	895.8	894.6	902.1	902.1	904.6	899.6	897.1	880.8	839.5	777.0
30°	999.7	992.2	997.2	999.7	1004.7	1008.4	1003.4	995.9	975.9	930.9	853.3
32.5°	1093.5	1098.5	1106.0	1108.5	1116.0	1117.3	1104.8	1104.8	1084.7	1027.2	947.1
35°	1199.8	1199.8	1219.9	1228.6	1228.6	1236.1	1217.4	1207.4	1193.6	1133.5	1032.2
37.5°	1292.4	1294.9	1311.2	1331.2	1333.7	1345.0	1331.2	1327.5	1302.4	1241.1	1128.5
40°	1378.8	1381.3	1401.3	1425.1	1438.8	1456.3	1442.6	1436.3	1410.0	1340.0	1224.9
42.5°	1446.3	1451.3	1476.3	1511.4	1533.9	1555.2	1548.9	1545.2	1508.9	1435.1	1313.7
45°	1497.6	1506.4	1541.4	1582.7	1614.0	1645.3	1646.5	1639.0	1605.2	1522.6	1400.0
47.5°	1538.9	1548.9	1587.7	1640.2	1687.8	1726.6	1734.1	1725.3	1694.0	1607.7	1477.6
50°	1572.7	1577.7	1621.5	1689.0	1747.8	1796.6	1811.7	1804.1	1776.6	1679.0	1545.2
52.5°	1590.2	1597.7	1647.8	1725.3	1796.6	1855.4	1878.0	1874.2	1841.7	1744.1	1605.2
55°	1599.0	1606.5	1665.3	1754.1	1834.2	1903.0	1930.5	1931.8	1900.5	1802.9	1661.5
57.5°	1589.0	1599.0	1662.8	1761.6	1850.4	1924.3	1966.8	1965.5	1940.5	1847.9	1709.1
59°	1571.4	1578.9	1647.8	1751.6	1847.9	1921.8	1970.6	1971.8	1949.3	1863.0	1730.3
60°	1551.4	1560.2	1630.2	1739.1	1837.9	1913.0	1964.3	1966.8	1948.0	1866.7	1739.1
62.5°	1482.6	1493.9	1571.4	1687.8	1795.4	1866.7	1928.0	1931.8	1921.8	1856.7	1745.3
65°	1386.3	1396.3	1480.1	1604.0	1716.6	1790.4	1847.9	1856.7	1855.4	1811.7	1720.3
67.5°	1268.7	1269.9	1348.7	1483.9	1601.5	1674.0	1729.1	1744.1	1755.4	1726.6	1646.5
70°	1127.3	1126.0	1202.3	1336.2	1453.8	1530.1	1585.2	1595.2	1624.0	1601.5	1536.4
72.5°	952.1	967.1	1038.4	1151.1	1267.4	1352.5	1401.3	1420.0	1436.3	1441.3	1387.5
75°	787.0	803.2	859.5	964.6	1064.7	1143.5	1196.1	1204.9	1234.9	1242.4	1192.3
77.5°	629.3	630.6	671.9	755.7	847.0	912.1	954.6	977.1	993.4	1008.4	955.9
80°	441.7	447.9	476.7	536.7	608.1	676.9	711.9	726.9	738.2	748.2	730.7
82.5°	276.5	279.0	297.8	334.1	382.9	421.6	457.9	470.4	472.9	495.5	493.0
85°	131.4	132.6	145.1	162.6	183.9	215.2	229.0	229.0	246.5	262.7	262.7
87.5°	17.5	17.5	21.3	23.8	30.0	38.8	53.8	55.1	65.1	72.6	78.8
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: P472180
 CATALOG NUMBER: CCW-VA-4-827-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	445.4	445.4	445.4	445.4	445.4	445.4	445.4	445.4	445.4	445.4	445.4
2.5°	446.7	446.7	446.7	446.7	446.7	445.4	446.7	446.7	446.7	446.7	446.7
5°	455.4	454.2	452.9	451.7	451.7	450.4	450.4	450.4	450.4	450.4	450.4
7.5°	464.2	462.9	461.7	459.2	457.9	456.7	456.7	455.4	455.4	455.4	455.4
10°	479.2	477.9	472.9	469.2	466.7	465.4	464.2	462.9	461.7	461.7	461.7
12.5°	499.2	496.7	487.9	482.9	479.2	476.7	474.2	472.9	471.7	470.4	470.4
15°	524.2	518.0	506.7	499.2	494.2	490.4	486.7	484.2	482.9	481.7	481.7
17.5°	554.3	546.7	531.7	518.0	509.2	503.0	498.0	494.2	493.0	493.0	493.0
20°	591.8	579.3	558.0	539.2	525.5	516.7	509.2	505.5	504.2	503.0	501.7
22.5°	635.6	619.3	588.0	559.3	541.7	529.2	520.5	515.5	511.7	510.5	510.5
25°	685.6	661.9	620.6	585.5	561.8	544.2	533.0	526.7	520.5	518.0	518.0
27.5°	745.7	714.4	659.4	613.1	580.5	559.3	546.7	538.0	531.7	526.7	524.2
30°	810.7	775.7	701.9	643.1	601.8	578.0	563.0	553.0	544.2	535.5	534.2
32.5°	893.3	843.3	753.2	676.9	626.8	596.8	579.3	566.8	555.5	546.7	544.2
35°	977.1	917.1	807.0	711.9	650.6	614.3	593.0	579.3	568.0	558.0	556.8
37.5°	1063.5	999.7	865.8	753.2	678.1	634.3	608.1	593.0	579.3	569.3	568.0
40°	1153.6	1078.5	925.8	795.7	706.9	654.3	624.3	605.6	590.5	581.8	580.5
42.5°	1238.6	1157.3	990.9	845.8	740.7	675.6	640.6	620.6	601.8	593.0	591.8
45°	1320.0	1232.4	1056.0	892.1	774.5	698.1	656.9	633.1	613.1	604.3	603.1
47.5°	1393.8	1306.2	1116.0	942.1	809.5	723.2	674.4	645.6	623.1	614.3	614.3
50°	1460.1	1368.8	1174.8	988.4	842.0	748.2	689.4	656.9	634.3	625.6	624.3
52.5°	1522.6	1423.8	1226.1	1028.4	873.3	770.7	704.4	665.6	641.8	631.8	630.6
55°	1572.7	1473.8	1268.7	1061.0	894.6	785.7	714.4	670.6	644.3	635.6	634.3
57.5°	1616.5	1515.1	1298.7	1083.5	908.3	794.5	719.4	670.6	643.1	633.1	631.8
59°	1635.2	1532.7	1308.7	1089.7	910.8	795.7	718.2	666.9	638.1	628.1	625.6
60°	1645.3	1540.2	1312.4	1091.0	909.6	793.2	716.9	663.1	633.1	621.8	621.8
62.5°	1655.3	1546.4	1307.4	1081.0	895.8	779.5	704.4	648.1	614.3	601.8	601.8
65°	1634.0	1523.9	1278.7	1053.5	868.3	755.7	680.6	623.1	585.5	573.0	573.0
67.5°	1571.4	1468.8	1226.1	1002.2	823.3	714.4	641.8	583.0	548.0	534.2	530.5
70°	1465.1	1378.8	1143.5	928.3	761.9	661.9	593.0	536.7	500.5	486.7	481.7
72.5°	1322.5	1237.4	1033.4	838.3	680.6	593.0	533.0	479.2	439.2	425.4	426.6
75°	1126.0	1066.0	890.8	724.4	586.8	505.5	455.4	410.4	376.6	365.3	366.6
77.5°	913.3	863.3	721.9	590.5	479.2	416.6	374.1	337.8	315.3	309.0	305.3
80°	699.4	650.6	541.7	440.4	364.1	320.3	291.5	266.5	249.0	240.2	242.7
82.5°	469.2	439.2	359.1	291.5	247.7	216.4	206.4	190.2	183.9	178.9	182.7
85°	252.7	226.5	187.7	156.4	136.4	127.6	130.1	128.9	123.9	122.6	126.4
87.5°	82.6	71.3	55.1	46.3	47.5	42.5	42.5	40.0	36.3	35.0	37.5
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)