

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: P677178

Luminaire Tested: **CCW-SA-2B-827-U-SL4-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677178
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2B-827-U-SL4-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @450mA w/
SL4 distribution lens and House Side Shield
Light Source: (32) 2700K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

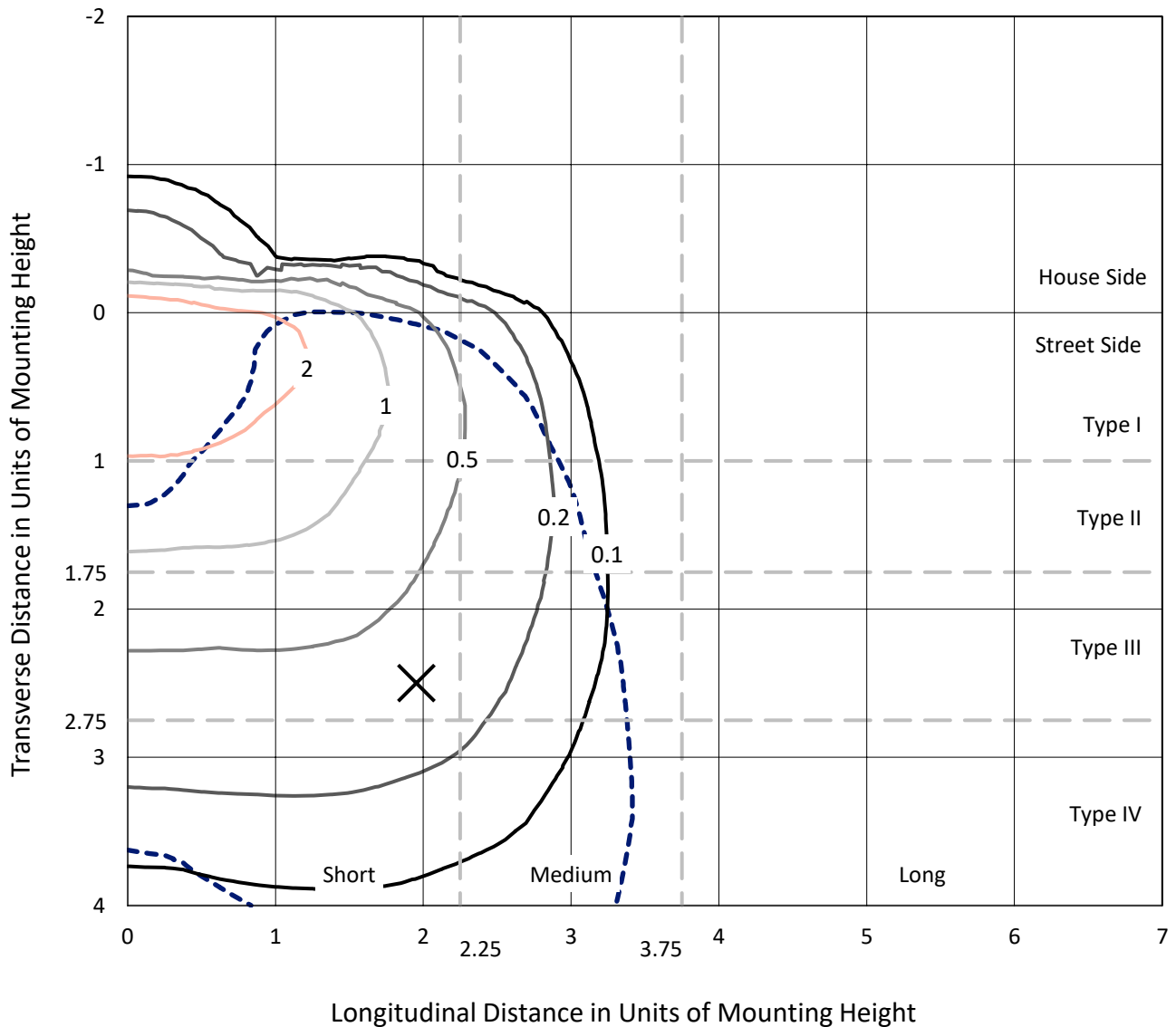
Lumens per Lamp: N/A
Luminaire Lumens: 4193.5 lumens
Efficiency: N/A
Efficacy: 91.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 46
Input Voltage (V): 120
Input Current (A_{in}): 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: P677178
 CATALOG NUMBER: CCW-SA-2B-827-U-SL4-HSS

Iso-Footcandle Lines of Horizontal Illumination

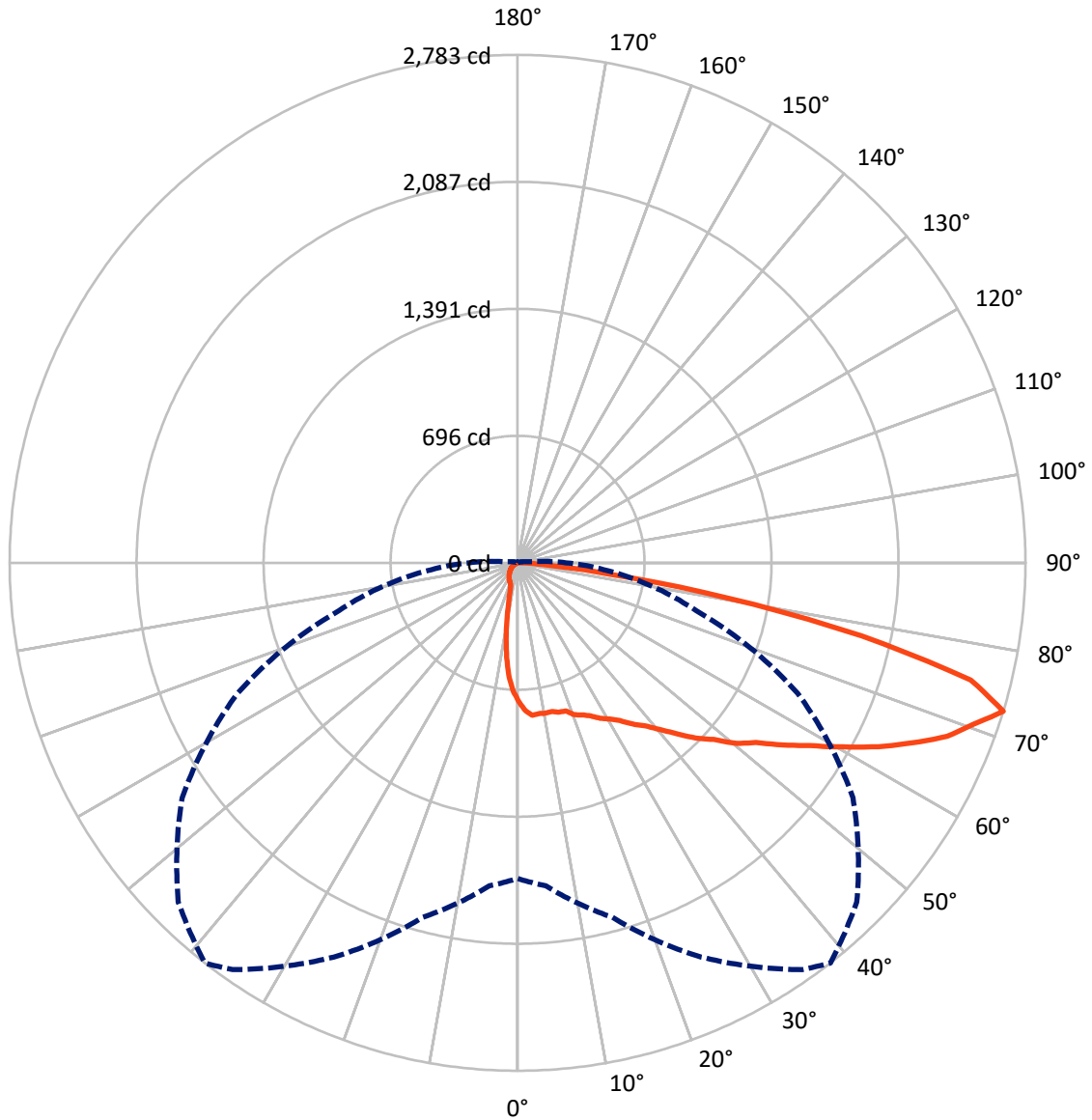
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.6 fc
 Type IV - Short - N/A

REPORT NUMBER: P677178
CATALOG NUMBER: CCW-SA-2B-827-U-SL4-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical



REPORT NUMBER: P677178
 CATALOG NUMBER: CCW-SA-2B-827-U-SL4-HSS

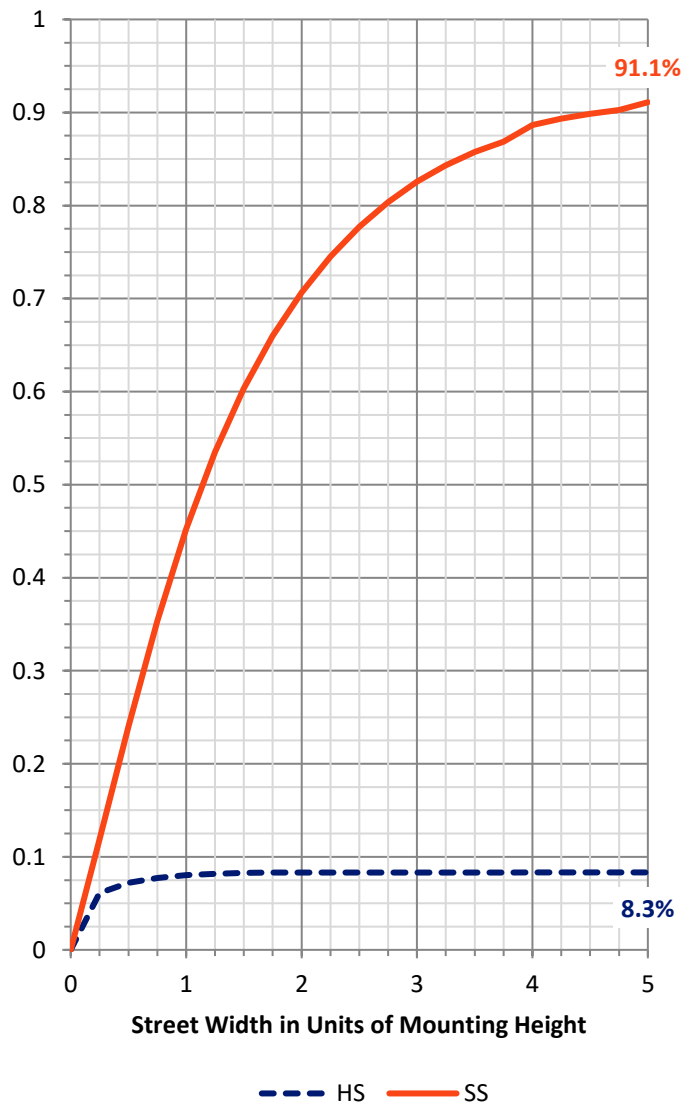
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	351.2	0.0	351.2
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	3842.3	0.0	3842.3
	% Fixture	91.6	0.0	91.6
Total	Lumens	4193.5	0.0	4193.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.4	1.6
10°-20°	162.5	3.9
20°-30°	260.5	6.2
30°-40°	393.4	9.4
40°-50°	598.7	14.3
50°-60°	842.9	20.1
60°-70°	1029.6	24.6
70°-80°	747.6	17.8
80°-90°	92.1	2.2
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°	4193.5	100.0
0°-180°	4193.5	100.0

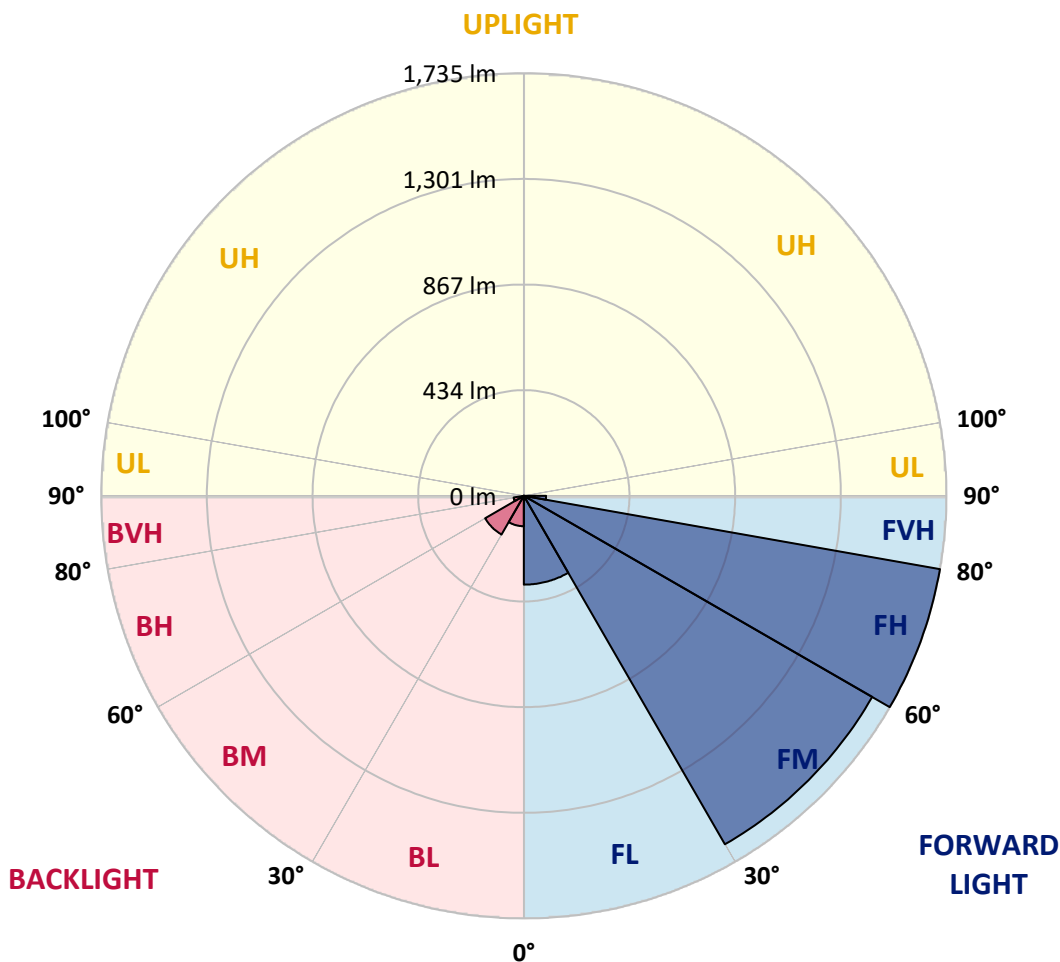


REPORT NUMBER: P677178
 CATALOG NUMBER: CCW-SA-2B-827-U-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	364.7	8.7			
FM (30°-60°)	1651.4	39.4			
FH (60°-80°)	1734.6	41.4			G1/1800
FVH (80°-90°)	91.6	2.2			G1/100
BL (0°-30°)	124.7	3.0	B1/500		
BM (30°-60°)	183.5	4.4	B0/220		
BH (60°-80°)	42.6	1.0	B0/110		G0/110
BVH (80°-90°)	0.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1
 Type IV Short





REPORT NUMBER: P677178

CATALOG NUMBER: CCW-SA-2B-827-U-SL4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	758.4	758.4	758.4	758.4	758.4	758.4	758.4	758.4	758.4	758.4	758.4
2.5°	833.1	833.1	841.0	833.1	830.2	811.5	812.5	802.6	792.8	779.0	766.2
5°	842.9	849.8	854.7	847.9	837.0	839.0	845.9	827.2	800.6	783.9	755.4
7.5°	839.0	853.8	849.8	845.9	839.0	834.1	824.3	816.4	803.6	787.9	754.4
10°	836.1	841.0	842.0	839.0	824.3	838.0	827.2	814.4	798.7	780.0	738.7
12.5°	825.2	825.2	834.1	827.2	829.2	836.1	831.1	828.2	811.5	795.7	759.3
15°	813.4	817.4	831.1	842.0	851.8	848.8	845.9	837.0	822.3	804.6	766.2
17.5°	816.4	818.4	840.0	859.7	854.7	852.8	868.5	849.8	835.1	815.4	772.1
20°	827.2	833.1	857.7	883.3	888.2	888.2	882.3	871.5	850.8	824.3	782.9
22.5°	838.0	840.0	880.3	912.8	917.7	904.9	909.8	878.4	858.7	843.9	793.8
25°	879.3	875.4	918.7	944.3	941.3	928.5	923.6	896.1	888.2	861.6	817.4
27.5°	935.4	918.7	961.0	976.7	961.0	964.9	951.1	921.6	904.9	889.2	828.2
30°	969.8	979.7	1002.3	1018.0	991.5	992.5	985.6	953.1	927.5	931.5	864.6
32.5°	1022.9	1029.8	1046.5	1053.4	1032.8	1030.8	1023.9	998.4	979.7	975.7	913.8
35°	1080.0	1092.8	1093.8	1095.7	1077.0	1084.9	1075.1	1038.7	1048.5	1055.4	972.8
37.5°	1136.1	1124.3	1143.9	1152.8	1132.1	1132.1	1135.1	1110.5	1128.2	1148.8	1056.4
40°	1157.7	1162.6	1197.0	1190.2	1214.7	1200.0	1210.8	1204.9	1219.7	1266.9	1174.4
42.5°	1180.3	1186.2	1232.4	1245.2	1274.7	1279.7	1295.4	1296.4	1339.7	1417.4	1287.5
45°	1223.6	1213.8	1276.7	1308.2	1356.4	1370.2	1388.8	1404.6	1472.4	1563.9	1416.4
47.5°	1262.9	1249.2	1321.0	1383.9	1442.9	1445.9	1497.0	1513.8	1594.4	1698.7	1544.2
50°	1318.0	1322.9	1353.4	1461.6	1521.6	1556.1	1591.5	1646.5	1736.1	1847.2	1636.7
52.5°	1375.1	1370.2	1421.3	1527.5	1622.0	1634.7	1714.4	1776.4	1873.8	1957.4	1678.0
55°	1444.9	1450.8	1470.5	1610.1	1730.1	1760.6	1850.1	1915.1	2021.3	2004.6	1691.8
57.5°	1514.7	1508.8	1553.1	1702.6	1865.9	1888.5	2007.5	2045.9	2117.7	2036.0	1657.4
60°	1583.6	1594.4	1613.1	1806.9	2014.4	2047.9	2142.3	2161.9	2177.7	2050.8	1630.8
62.5°	1662.3	1636.7	1694.7	1917.0	2148.2	2218.0	2292.8	2215.1	2201.3	2024.2	1569.8
65°	1701.6	1709.5	1785.2	2042.9	2326.2	2377.4	2387.2	2286.9	2216.0	1965.2	1512.8
67.5°	1762.6	1773.4	1869.8	2171.8	2509.2	2537.7	2502.3	2351.8	2203.3	1888.5	1307.2
70°	1770.5	1797.0	1982.9	2306.5	2624.2	2648.8	2621.3	2395.1	2100.0	1586.5	967.9
72.5°	1729.2	1776.4	2010.5	2383.3	2720.6	2782.6	2628.2	2242.6	1692.8	1012.1	495.7
75°	1306.2	1345.6	1840.3	2269.2	2549.5	2564.2	2307.5	1711.5	963.9	345.2	126.9
77.5°	676.7	744.6	1228.5	1734.1	1942.6	1926.9	1606.2	1008.2	331.5	90.5	51.1
80°	388.5	405.2	537.0	973.8	1221.6	1161.6	888.2	434.8	145.6	45.2	33.4
82.5°	191.8	215.4	289.2	435.7	610.8	502.6	333.4	260.7	81.6	24.6	29.5
85°	41.3	43.3	147.5	208.5	247.9	163.3	114.1	219.3	29.5	14.8	28.5
87.5°	29.5	28.5	41.3	93.4	68.9	42.3	67.9	115.1	6.9	6.9	5.9
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: P677178

CATALOG NUMBER: CCW-SA-2B-827-U-SL4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	758.4	758.4	758.4	758.4	758.4	758.4	758.4	758.4	758.4	758.4	758.4
2.5°	758.4	749.5	739.7	721.0	716.1	713.1	696.4	695.4	692.5	685.6	682.6
5°	737.7	722.9	704.3	684.6	668.8	640.3	605.9	588.2	566.6	567.5	560.7
7.5°	734.7	707.2	680.6	639.3	589.2	536.1	482.9	448.5	423.9	409.2	412.1
10°	721.0	700.3	657.0	580.3	499.7	419.0	351.1	300.0	270.5	247.9	254.8
12.5°	726.9	686.6	625.6	523.3	408.2	308.8	224.3	175.1	153.4	145.6	147.5
15°	722.9	686.6	606.9	461.3	320.7	209.5	145.6	129.8	125.9	125.9	123.9
17.5°	734.7	694.4	575.4	400.3	230.2	139.7	124.9	122.0	119.0	119.0	119.0
20°	751.5	698.4	553.8	332.5	162.3	122.9	117.0	115.1	114.1	114.1	113.1
22.5°	752.5	694.4	513.4	257.7	124.9	116.1	111.1	110.2	110.2	108.2	108.2
25°	758.4	698.4	470.2	193.8	116.1	109.2	105.2	104.3	105.2	104.3	103.3
27.5°	773.1	705.2	426.9	141.6	109.2	103.3	100.3	99.3	99.3	99.3	97.4
30°	791.8	705.2	378.7	117.0	103.3	97.4	94.4	93.4	92.5	92.5	92.5
32.5°	831.1	727.9	319.7	104.3	95.4	90.5	87.5	87.5	86.6	86.6	85.6
35°	880.3	743.6	259.7	96.4	88.5	83.6	80.7	80.7	79.7	79.7	78.7
37.5°	941.3	782.9	198.7	90.5	81.6	76.7	73.8	73.8	73.8	72.8	72.8
40°	1027.9	823.3	147.5	82.6	74.8	69.8	67.9	66.9	65.9	65.9	63.9
42.5°	1120.3	885.2	110.2	76.7	68.9	64.9	62.0	59.0	59.0	56.1	56.1
45°	1220.6	939.3	89.5	69.8	63.0	58.0	55.1	53.1	50.2	48.2	48.2
47.5°	1319.0	972.8	78.7	62.0	57.0	53.1	50.2	46.2	42.3	41.3	40.3
50°	1398.7	982.6	69.8	56.1	52.1	48.2	44.3	39.3	35.4	33.4	32.5
52.5°	1398.7	928.5	63.0	50.2	47.2	43.3	38.4	32.5	27.5	25.6	24.6
55°	1398.7	842.9	56.1	46.2	42.3	39.3	32.5	26.6	21.6	18.7	17.7
57.5°	1378.0	739.7	50.2	41.3	37.4	33.4	27.5	20.7	15.7	12.8	12.8
60°	1321.0	631.5	43.3	36.4	32.5	27.5	21.6	14.8	9.8	6.9	6.9
62.5°	1248.2	502.6	37.4	30.5	26.6	22.6	16.7	9.8	3.9	2.0	2.0
65°	1121.3	370.8	32.5	25.6	20.7	16.7	10.8	3.9	0.0	0.0	0.0
67.5°	925.6	247.9	25.6	20.7	17.7	11.8	6.9	1.0	0.0	0.0	0.0
70°	651.1	140.7	19.7	14.8	12.8	7.9	2.0	0.0	0.0	0.0	0.0
72.5°	267.5	62.0	13.8	10.8	8.9	3.9	0.0	0.0	0.0	0.0	0.0
75°	72.8	27.5	8.9	5.9	4.9	1.0	0.0	0.0	0.0	0.0	0.0
77.5°	42.3	18.7	3.9	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	33.4	8.9	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	33.4	4.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	28.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)