

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: P676648

Luminaire Tested: **CCW-SA-2D-850-U-T4FT-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676648
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2D-850-U-T4FT-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA w/
T4FT distribution lens and House Side Shield
Light Source: (32) 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

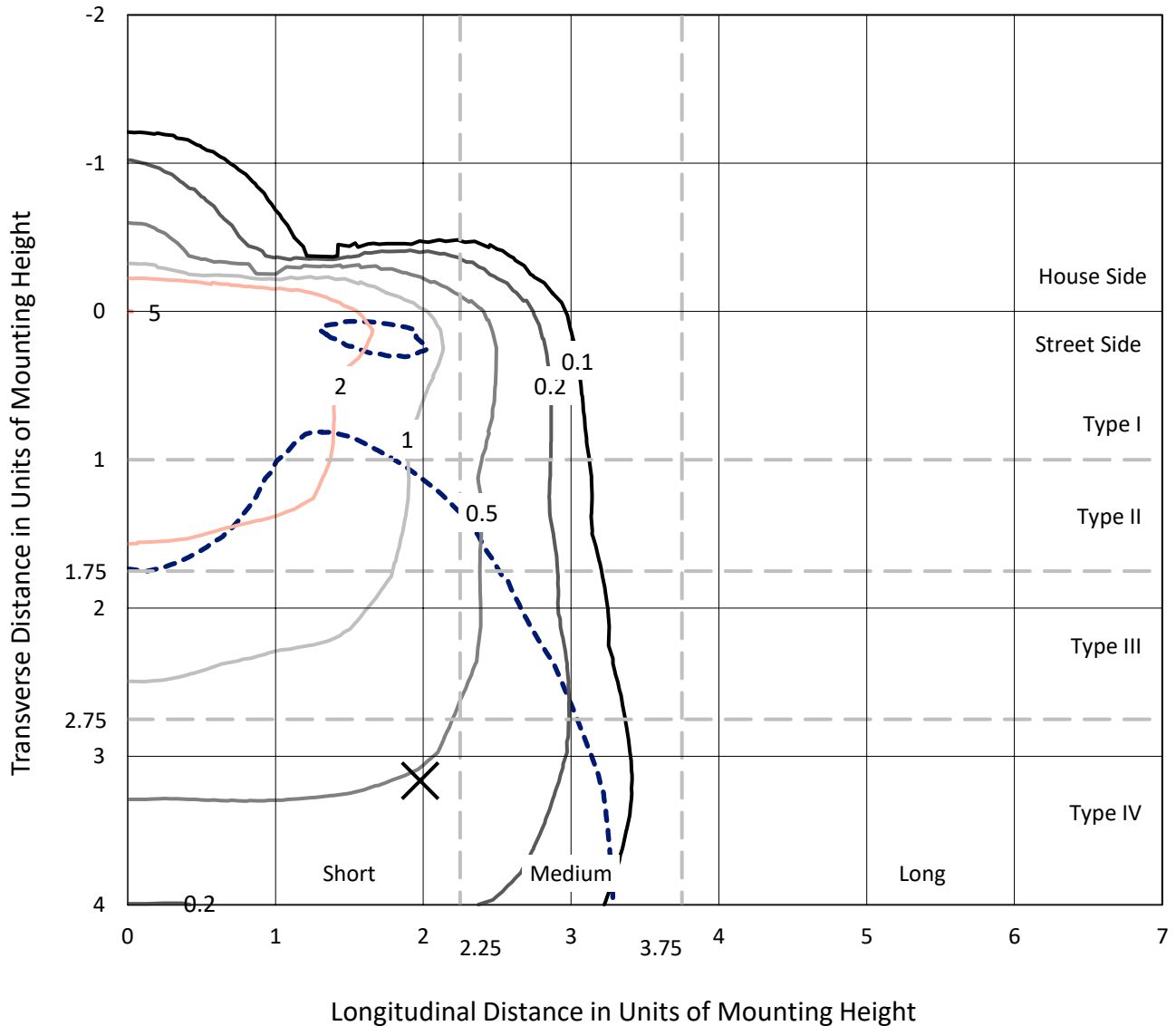
Lumens per Lamp: N/A
Luminaire Lumens: 6988 lumens
Efficiency: N/A
Efficacy: 86.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 80.8
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: 25 FT

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Iso-Footcandle Lines of Horizontal Illumination

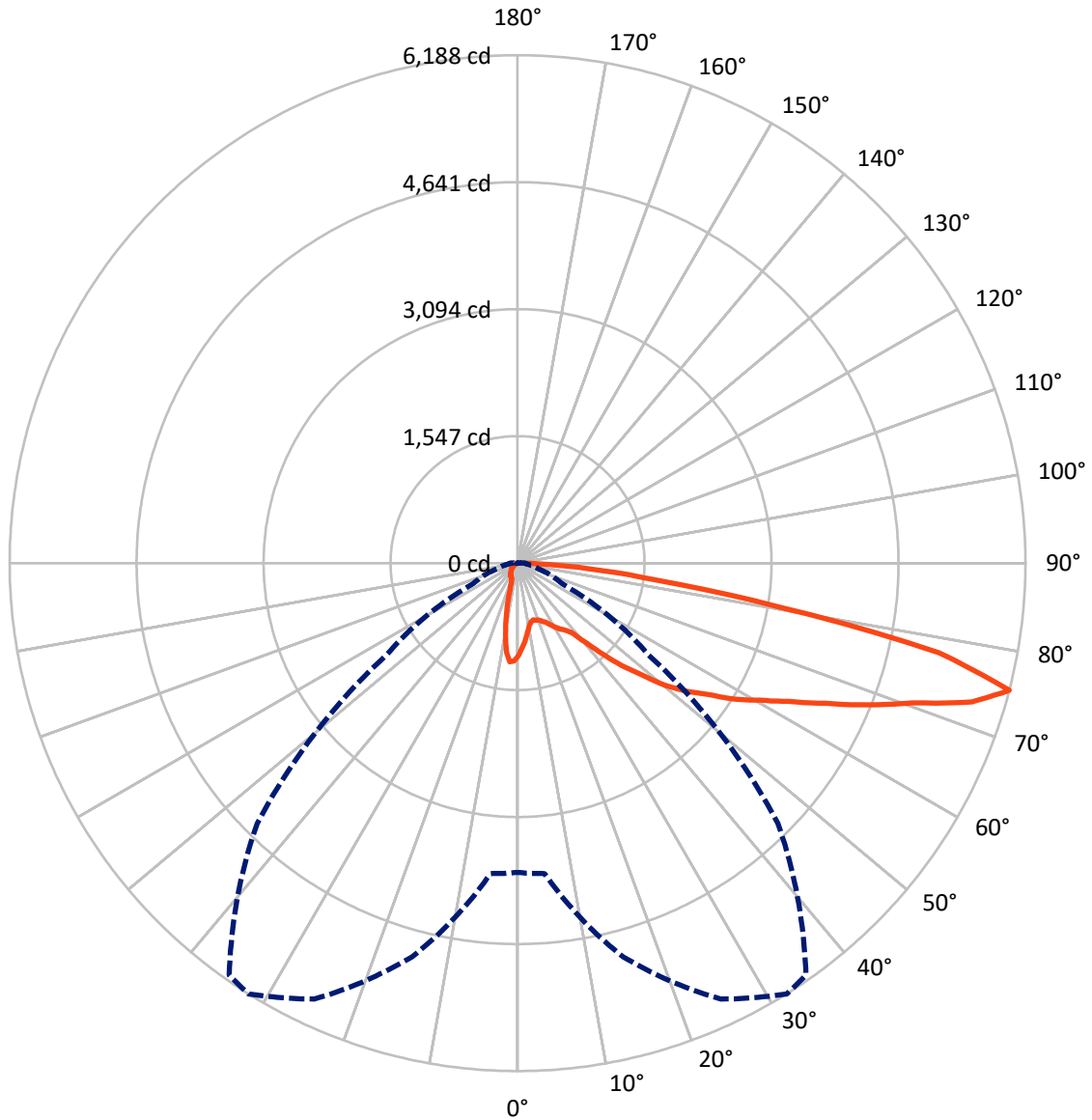
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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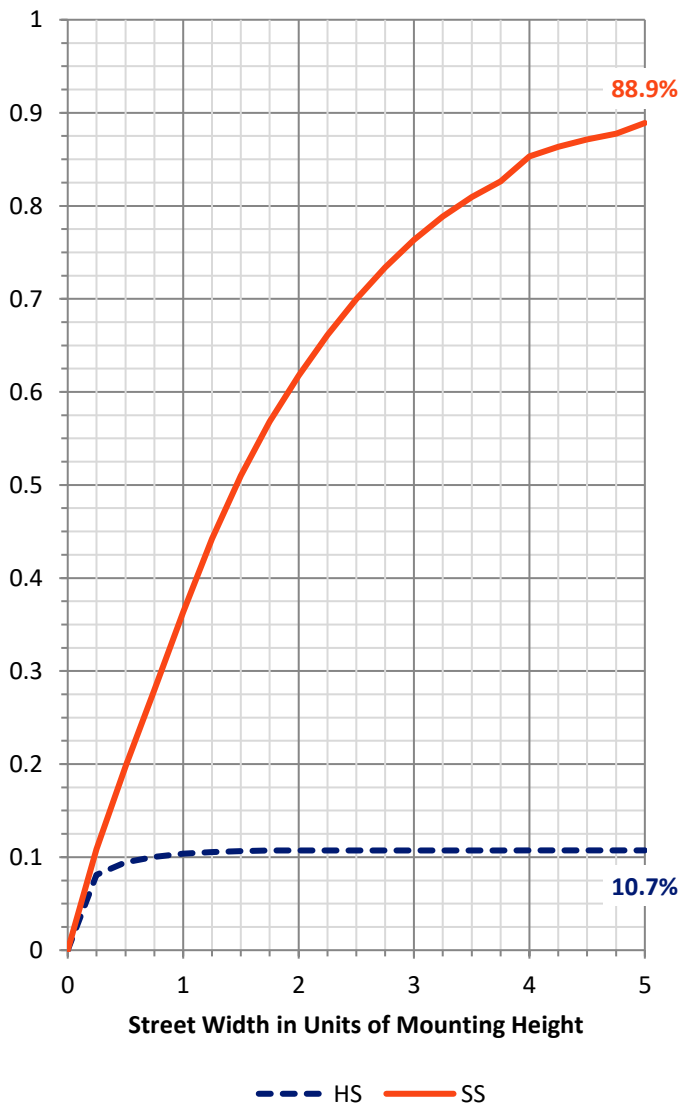
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	754.9	0.0	754.9
	% Fixture	10.8	0.0	10.8
Street Side	Lumens	6233.0	0.0	6233.0
	% Fixture	89.2	0.0	89.2
Total	Lumens	6988.0	0.0	6988.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.2	1.4
10°-20°	225.1	3.2
20°-30°	337.1	4.8
30°-40°	517.4	7.4
40°-50°	904.8	12.9
50°-60°	1414.3	20.2
60°-70°	1828.5	26.2
70°-80°	1489.3	21.3
80°-90°	172.4	2.5
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°	6988.0	100.0
0°-180°	6988.0	100.0



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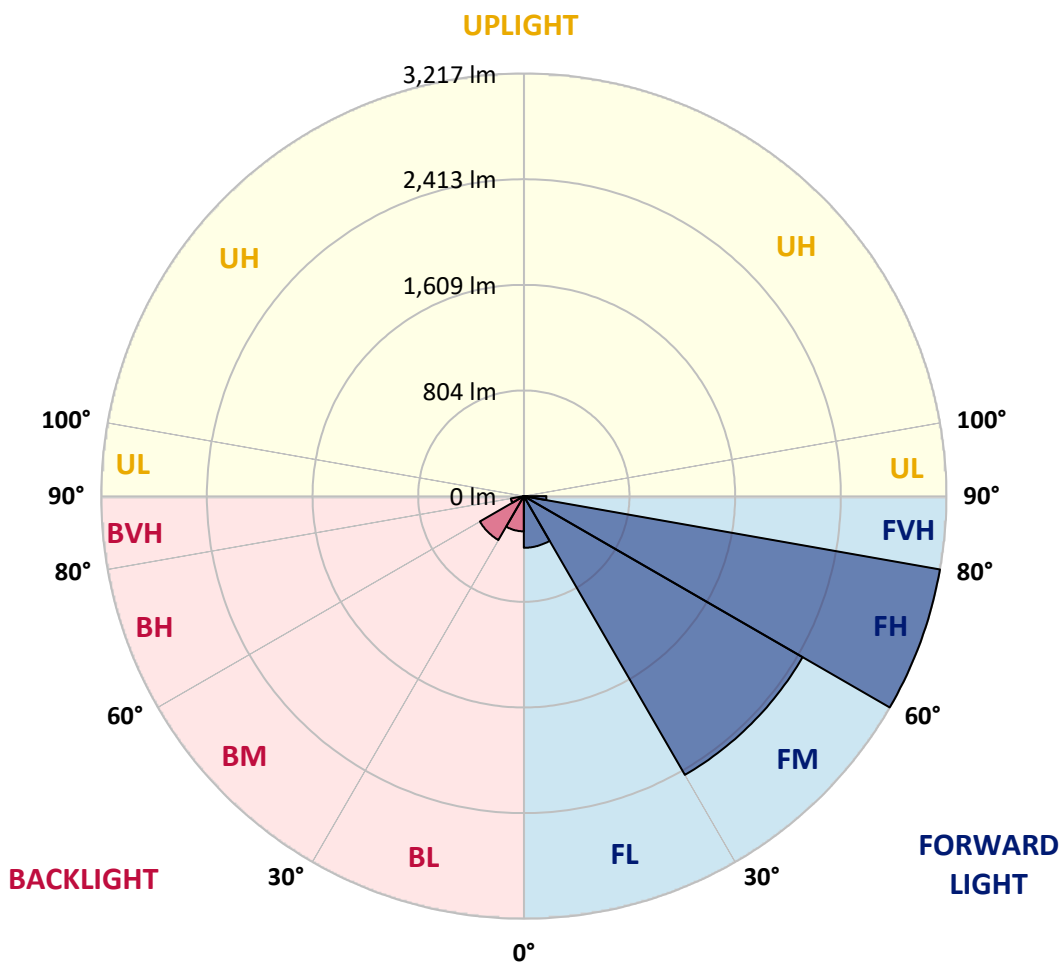
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	393.2	5.6			
FM (30°-60°)	2450.3	35.1			
FH (60°-80°)	3217.3	46.0			G2/5000
FVH (80°-90°)	172.3	2.5			G2/225
BL (0°-30°)	268.2	3.8	B1/500		
BM (30°-60°)	386.2	5.5	B1/1000		
BH (60°-80°)	100.4	1.4	B0/110		G0/110
BVH (80°-90°)	0.1	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-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	1128.3	1128.3	1128.3	1128.3	1128.3	1128.3	1128.3	1128.3	1128.3	1128.3	1128.3
2.5°	1011.9	1026.3	1024.5	1033.4	1035.2	1040.6	1053.1	1053.1	1088.9	1114.0	1130.1
5°	920.6	911.6	915.2	926.0	952.8	951.0	981.5	997.6	1040.6	1076.4	1114.0
7.5°	807.7	806.0	813.1	838.2	857.9	874.0	906.3	947.4	1004.8	1058.5	1124.8
10°	736.1	732.5	746.9	754.0	777.3	788.0	838.2	902.7	970.7	1047.7	1124.8
12.5°	720.0	707.5	714.6	712.8	734.3	739.7	788.0	866.9	949.2	1044.2	1139.1
15°	728.9	720.0	712.8	712.8	718.2	721.8	773.7	843.6	936.7	1049.5	1171.3
17.5°	757.6	752.2	730.7	709.2	732.5	732.5	764.8	838.2	938.5	1065.7	1210.7
20°	791.6	786.3	748.6	723.6	739.7	757.6	791.6	850.7	943.9	1078.2	1271.6
22.5°	829.2	829.2	777.3	748.6	770.1	771.9	832.8	890.1	965.4	1110.4	1311.0
25°	875.8	872.2	822.1	789.8	797.0	816.7	872.2	933.1	1004.8	1155.2	1384.5
27.5°	936.7	931.3	872.2	840.0	848.9	870.4	933.1	994.0	1040.6	1173.1	1447.1
30°	986.9	981.5	933.1	884.8	904.5	924.2	997.6	1051.3	1085.4	1207.1	1518.8
32.5°	997.6	988.6	956.4	934.9	956.4	994.0	1051.3	1106.8	1158.8	1293.1	1654.9
35°	1121.2	1088.9	1004.8	970.7	1003.0	1015.5	1110.4	1208.9	1259.1	1361.2	1807.1
37.5°	1357.6	1327.1	1216.1	1121.2	1076.4	1090.7	1214.3	1336.1	1384.5	1488.3	1973.7
40°	1647.7	1597.6	1479.4	1352.2	1260.9	1243.0	1323.6	1502.7	1549.2	1647.7	2192.2
42.5°	1979.1	1930.7	1748.0	1597.6	1504.5	1481.2	1493.7	1696.1	1735.5	1794.6	2335.5
45°	2217.3	2192.2	1986.2	1851.9	1778.5	1753.4	1723.0	1907.4	1957.6	1977.3	2543.2
47.5°	2355.2	2337.3	2222.7	2131.3	2032.8	2005.9	2025.6	2201.2	2167.1	2183.3	2742.0
50°	2539.7	2493.1	2337.3	2365.9	2346.2	2339.1	2373.1	2450.1	2400.0	2353.4	2958.8
52.5°	2688.3	2605.9	2496.7	2566.5	2597.0	2623.8	2743.8	2801.2	2577.3	2505.6	3098.5
55°	2779.7	2700.9	2729.5	2794.0	2826.2	2949.8	3091.3	3048.3	2693.7	2627.4	3284.7
57.5°	2862.0	2867.4	2944.4	2964.1	3128.9	3150.4	3422.6	3282.9	2776.1	2738.5	3358.2
60°	3060.9	3041.1	3103.8	3231.0	3388.6	3508.6	3768.3	3440.5	2817.3	2795.8	3338.5
62.5°	3419.1	3297.3	3318.8	3479.9	3711.0	3841.7	3967.1	3512.2	2806.5	2804.7	3279.4
65°	3874.0	3734.3	3669.8	3820.2	4119.3	4303.8	4191.0	3592.8	2734.9	2785.0	3059.1
67.5°	4251.9	4253.7	4133.7	4217.8	4608.3	4647.7	4402.3	3576.7	2614.9	2629.2	2521.8
70°	4687.1	4746.2	4640.5	4903.8	5099.0	5124.1	4644.1	3444.1	2357.0	1982.7	1448.9
72.5°	4798.1	4828.6	5158.1	5562.9	5783.2	5790.4	4882.3	3001.7	1551.0	875.8	449.5
75°	3768.3	3797.0	4964.7	5860.2	6188.0	6125.3	4484.7	1948.6	603.6	256.1	107.5
77.5°	2102.7	2111.6	3082.3	4737.2	5249.5	4996.9	3141.4	759.4	243.6	146.9	50.1
80°	574.9	675.2	1142.7	2335.5	3205.9	3146.8	1495.5	247.2	157.6	114.6	23.3
82.5°	137.9	148.7	367.2	1033.4	1694.3	1767.7	446.0	125.4	109.3	94.9	12.5
85°	50.1	55.5	112.8	503.3	870.4	798.8	134.3	62.7	80.6	73.4	5.4
87.5°	17.9	17.9	35.8	164.8	254.3	191.6	44.8	21.5	41.2	44.8	1.8
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1128.3	1128.3	1128.3	1128.3	1128.3	1128.3	1128.3	1128.3	1128.3	1128.3	1128.3
2.5°	1131.9	1131.9	1157.0	1178.5	1185.7	1194.6	1185.7	1205.4	1203.6	1194.6	1198.2
5°	1133.7	1166.0	1187.4	1201.8	1208.9	1207.1	1210.7	1189.2	1176.7	1167.7	1158.8
7.5°	1142.7	1173.1	1212.5	1208.9	1189.2	1148.0	1115.8	1058.5	1003.0	1001.2	992.2
10°	1173.1	1200.0	1223.3	1208.9	1137.3	1011.9	909.8	832.8	763.0	730.7	734.3
12.5°	1194.6	1244.8	1234.0	1160.6	1011.9	847.2	696.7	583.9	521.2	462.1	462.1
15°	1239.4	1257.3	1253.7	1090.7	857.9	660.9	478.2	363.6	297.3	270.4	266.9
17.5°	1282.4	1302.1	1241.2	985.1	705.7	444.2	290.1	225.7	216.7	213.1	214.9
20°	1336.1	1337.9	1230.4	879.4	530.1	281.2	207.8	202.4	204.2	202.4	202.4
22.5°	1393.4	1405.9	1192.8	730.7	352.8	204.2	193.4	195.2	195.2	195.2	200.6
25°	1468.6	1448.9	1133.7	589.2	231.0	188.1	188.1	189.8	189.8	189.8	191.6
27.5°	1518.8	1491.9	1058.5	424.5	180.9	177.3	180.9	180.9	184.5	184.5	184.5
30°	1622.7	1552.8	963.6	274.0	163.0	168.4	171.9	175.5	177.3	180.9	182.7
32.5°	1703.3	1606.5	845.4	182.7	148.7	152.2	161.2	168.4	175.5	173.7	173.7
35°	1850.1	1694.3	736.1	145.1	136.1	136.1	145.1	157.6	168.4	171.9	171.9
37.5°	2018.5	1765.9	583.9	132.5	125.4	125.4	130.7	145.1	159.4	166.6	163.0
40°	2158.2	1848.3	431.6	123.6	116.4	116.4	120.0	130.7	146.9	159.4	161.2
42.5°	2256.7	1909.2	291.9	114.6	109.3	107.5	112.8	118.2	130.7	148.7	152.2
45°	2346.2	1941.5	180.9	105.7	102.1	102.1	102.1	107.5	116.4	132.5	136.1
47.5°	2505.6	1977.3	130.7	98.5	93.1	94.9	96.7	98.5	105.7	109.3	111.0
50°	2640.0	2004.2	107.5	91.3	87.8	89.6	89.6	89.6	93.1	87.8	87.8
52.5°	2742.0	1977.3	91.3	84.2	80.6	82.4	80.6	80.6	77.0	69.8	69.8
55°	2817.3	1928.9	73.4	77.0	77.0	77.0	73.4	68.1	60.9	55.5	55.5
57.5°	2837.0	1846.5	57.3	64.5	69.8	69.8	62.7	55.5	46.6	41.2	39.4
60°	2806.5	1667.4	43.0	46.6	53.7	55.5	50.1	41.2	32.2	26.9	26.9
62.5°	2697.3	1525.9	34.0	30.4	39.4	41.2	35.8	26.9	17.9	12.5	10.7
65°	2489.5	1307.4	25.1	21.5	26.9	28.7	23.3	12.5	5.4	1.8	0.0
67.5°	1997.0	985.1	16.1	14.3	17.9	17.9	10.7	3.6	0.0	0.0	0.0
70°	1105.1	553.4	10.7	7.2	9.0	5.4	1.8	0.0	0.0	0.0	0.0
72.5°	318.8	157.6	5.4	3.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0
75°	86.0	37.6	3.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	37.6	14.3	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	16.1	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	9.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.8	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)