

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: P140452

Luminaire Tested: **ECM-E04-LED-E1-5WQ-7060**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P140452  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33687)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ECM-E04-LED-E1-5WQ-7060  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE  
Light Source: (84) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12261.3 lumens  
Efficiency: N/A  
Efficacy: 126.1 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B4 - U0 - G2

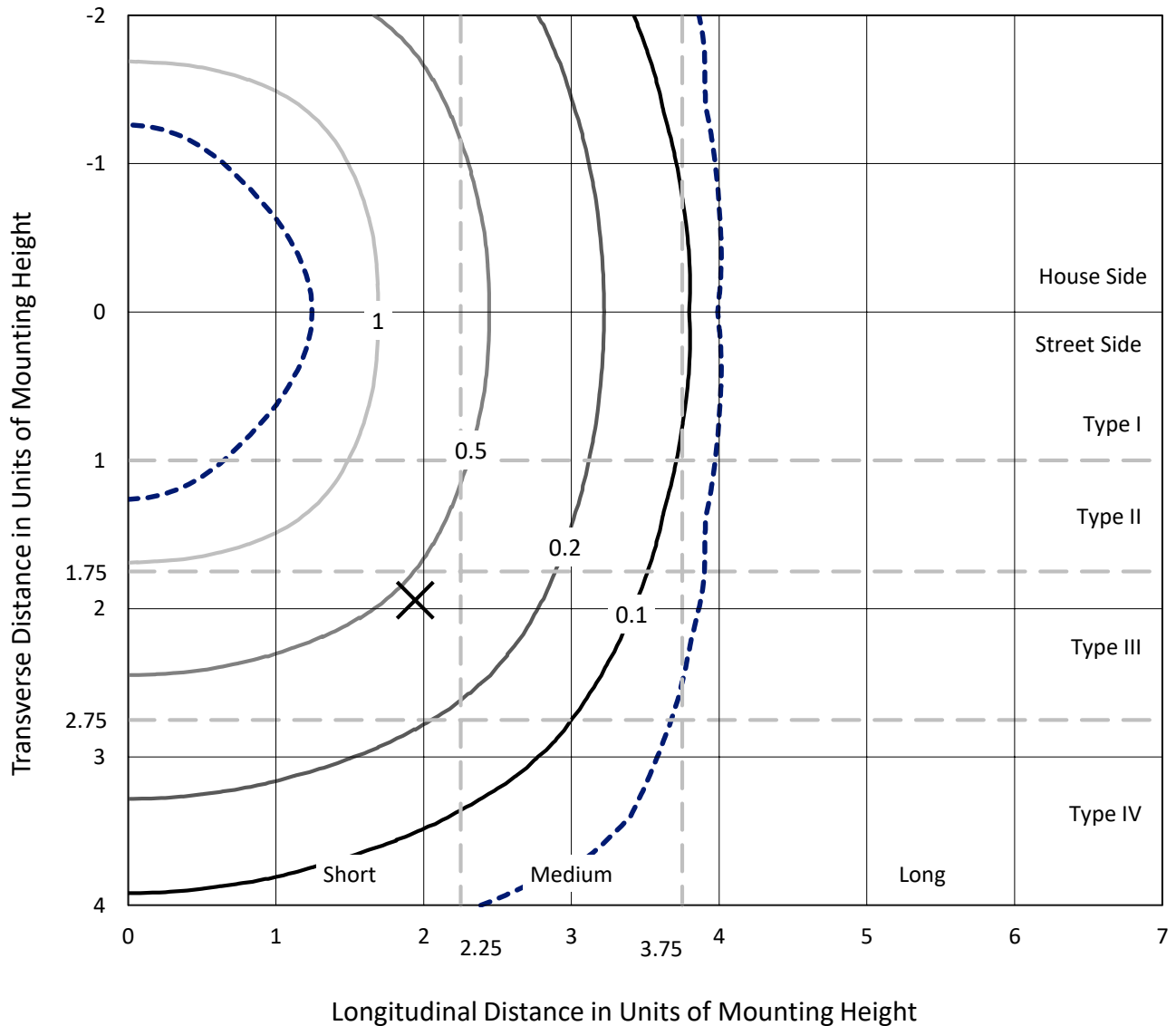
Input Watts (W): 97.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P140452  
 CATALOG NUMBER: ECM-E04-LED-E1-5WQ-7060

### Iso-Footcandle Lines of Horizontal Illumination

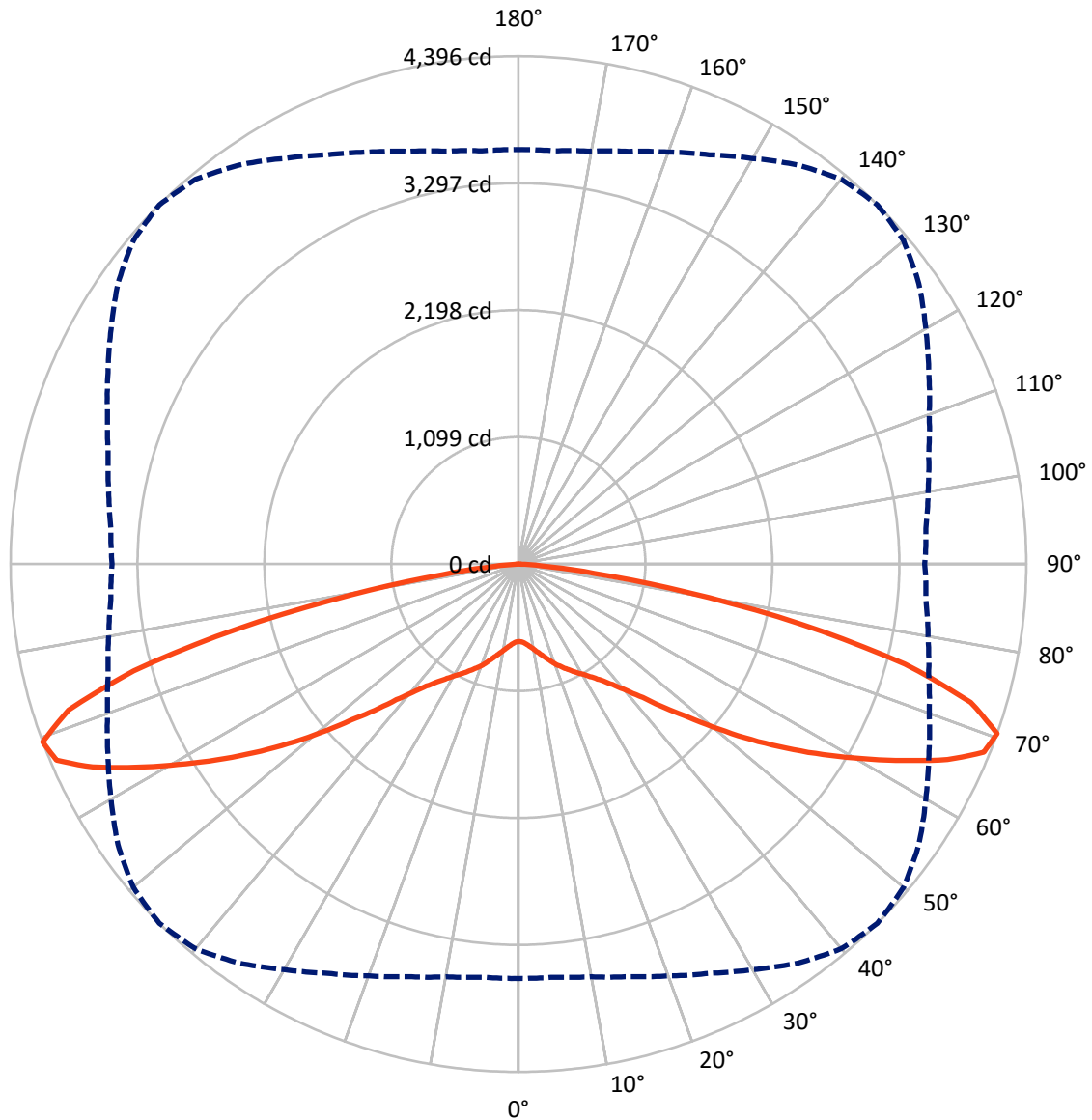
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 1.9 fc  
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P140452  
CATALOG NUMBER: ECM-E04-LED-E1-5WQ-7060

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P140452

CATALOG NUMBER: ECM-E04-LED-E1-5WQ-7060

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6130.7	0.0	6130.7
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	6130.7	0.0	6130.7
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	12261.3	0.0	12261.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.0	0.6
10°-20°	237.4	1.9
20°-30°	466.5	3.8
30°-40°	771.9	6.3
40°-50°	1351.2	11.0
50°-60°	2410.1	19.7
60°-70°	3720.9	30.3
70°-80°	2945.4	24.0
80°-90°	289.9	2.4
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°	12261.3	100.0
0°-180°	12261.3	100.0



REPORT NUMBER: P140452

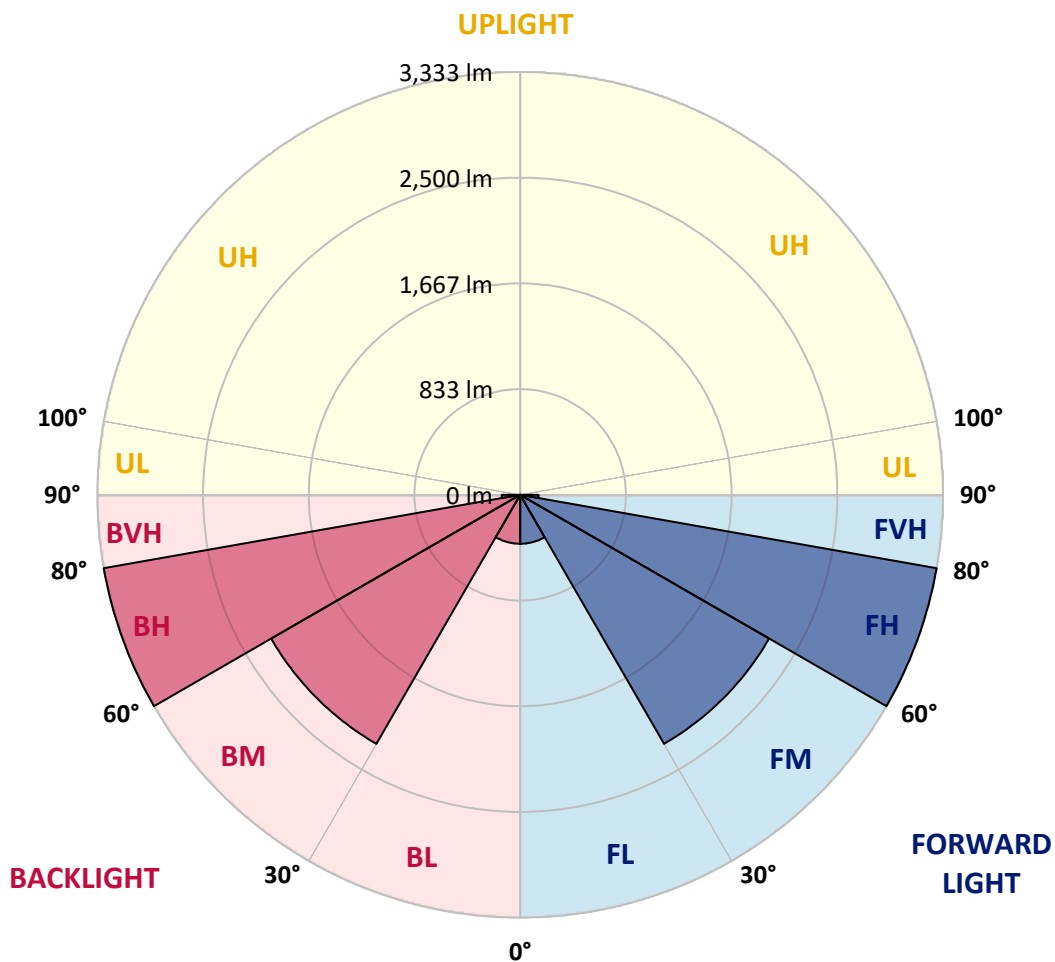
CATALOG NUMBER: ECM-E04-LED-E1-5WQ-7060

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	386.0	3.1			
FM	(30°-60°)	2266.6	18.5			
FH	(60°-80°)	3333.1	27.2			G2/5000
FVH	(80°-90°)	144.9	1.2			G2/225
BL	(0°-30°)	386.0	3.1	B1/500		
BM	(30°-60°)	2266.6	18.5	B2/2500		
BH	(60°-80°)	3333.1	27.2	B4/5000		G2/5000
BVH	(80°-90°)	144.9	1.2			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G2**

Type V Short





REPORT NUMBER: P140452  
 CATALOG NUMBER: ECM-E04-LED-E1-5WQ-7060

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	670.4	670.4	670.4	670.4	670.4	670.4	670.4	670.4	670.4	670.4	670.4
2.5°	678.6	678.6	677.2	677.2	677.2	677.2	675.9	675.9	677.2	675.9	675.9
5°	695.0	696.4	696.4	695.0	695.0	695.0	695.0	695.0	696.4	695.0	695.0
7.5°	719.6	721.0	721.0	719.6	719.6	719.6	719.6	719.6	721.0	721.0	718.3
10°	749.7	751.1	751.1	749.7	749.7	751.1	751.1	751.1	752.5	752.5	751.1
12.5°	785.3	786.7	788.0	786.7	788.0	788.0	789.4	790.8	790.8	790.8	788.0
15°	826.4	830.5	827.7	827.7	829.1	830.5	830.5	834.6	833.2	831.8	830.5
17.5°	874.2	872.9	872.9	874.2	875.6	874.2	875.6	879.7	878.3	877.0	875.6
20°	919.4	919.4	919.4	918.0	920.8	920.8	922.1	923.5	923.5	926.2	922.1
22.5°	963.2	963.2	961.8	961.8	964.5	964.5	967.3	970.0	970.0	970.0	967.3
25°	1004.2	1004.2	1005.6	1004.2	1005.6	1007.0	1009.7	1012.4	1013.8	1013.8	1013.8
27.5°	1041.2	1045.3	1043.9	1045.3	1048.0	1050.7	1053.5	1057.6	1060.3	1061.7	1057.6
30°	1087.7	1087.7	1086.3	1087.7	1090.4	1094.5	1100.0	1106.8	1106.8	1108.2	1108.2
32.5°	1136.9	1138.3	1135.6	1138.3	1142.4	1147.9	1153.3	1158.8	1161.6	1167.0	1165.7
35°	1201.2	1197.1	1198.5	1202.6	1205.3	1210.8	1217.6	1227.2	1232.7	1235.4	1232.7
37.5°	1275.1	1273.7	1276.5	1276.5	1286.1	1291.5	1303.8	1312.0	1316.2	1323.0	1320.3
40°	1368.1	1373.6	1375.0	1379.1	1384.6	1395.5	1409.2	1422.9	1431.1	1436.5	1437.9
42.5°	1494.0	1496.7	1491.3	1506.3	1521.4	1528.2	1544.6	1563.8	1576.1	1580.2	1581.6
45°	1648.6	1648.6	1656.8	1666.4	1685.5	1699.2	1717.0	1748.5	1759.4	1774.5	1774.5
47.5°	1833.3	1838.8	1838.8	1860.7	1875.7	1903.1	1937.3	1963.3	1986.5	1979.7	2003.0
50°	2046.7	2050.8	2065.9	2078.2	2104.2	2135.7	2167.1	2205.4	2239.6	2243.8	2247.9
52.5°	2269.7	2275.2	2287.5	2316.3	2347.7	2383.3	2440.8	2473.6	2506.4	2524.2	2521.5
55°	2525.6	2522.9	2543.4	2565.3	2611.8	2659.7	2707.6	2754.1	2788.3	2812.9	2811.5
57.5°	2793.7	2803.3	2826.6	2853.9	2893.6	2936.0	2993.5	3040.0	3096.1	3111.2	3089.3
60°	3105.7	3096.1	3119.4	3161.8	3197.3	3252.1	3302.7	3362.9	3402.6	3420.4	3413.5
62.5°	3424.5	3416.2	3434.0	3488.8	3531.2	3570.8	3640.6	3706.3	3739.1	3746.0	3733.7
65°	3658.4	3661.1	3689.9	3737.8	3804.8	3865.0	3943.0	4022.3	4074.3	4082.5	4055.2
67.5°	3713.1	3718.6	3758.3	3819.8	3903.3	4003.2	4119.5	4237.1	4326.1	4345.2	4305.5
70°	3587.3	3590.0	3628.3	3698.1	3793.9	3908.8	4053.8	4216.6	4346.6	4395.8	4352.1
72.5°	3328.7	3339.6	3371.1	3429.9	3505.2	3618.7	3758.3	3903.3	4031.9	4094.8	4094.8
75°	2862.2	2886.8	2901.8	2921.0	2986.7	3078.3	3191.9	3306.8	3420.4	3455.9	3356.0
77.5°	2042.6	2001.6	2011.2	2117.9	2102.8	2206.8	2332.7	2414.8	2516.0	2501.0	2357.3
80°	937.2	913.9	967.3	1038.4	1128.7	1198.5	1333.9	1347.6	1463.9	1470.8	1366.8
82.5°	187.4	197.0	235.3	290.0	361.2	439.2	510.3	570.5	649.9	664.9	617.0
85°	58.8	64.3	80.7	88.9	93.0	106.7	121.8	164.2	188.8	195.6	183.3
87.5°	12.3	19.2	31.5	35.6	36.9	35.6	35.6	34.2	27.4	21.9	26.0
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: P140452

CATALOG NUMBER: ECM-E04-LED-E1-5WQ-7060

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	670.4	670.4	670.4	670.4	670.4	670.4	670.4	670.4
2.5°	674.5	674.5	675.9	675.9	675.9	674.5	673.1	674.5
5°	693.6	693.6	693.6	693.6	690.9	690.9	689.5	689.5
7.5°	718.3	716.9	716.9	715.5	714.2	714.2	712.8	714.2
10°	751.1	748.4	747.0	745.6	744.3	744.3	742.9	741.5
12.5°	786.7	785.3	783.9	781.2	779.8	777.1	777.1	777.1
15°	827.7	826.4	825.0	820.9	820.9	816.8	818.1	818.1
17.5°	872.9	870.1	866.0	864.7	863.3	859.2	859.2	859.2
20°	919.4	913.9	911.2	908.4	908.4	904.3	903.0	903.0
22.5°	964.5	959.1	953.6	950.9	948.1	946.8	944.0	942.6
25°	1009.7	1004.2	998.7	994.6	989.2	986.4	983.7	983.7
27.5°	1054.8	1049.4	1041.2	1035.7	1030.2	1024.7	1022.0	1023.4
30°	1101.4	1095.9	1087.7	1080.8	1074.0	1068.5	1065.8	1064.4
32.5°	1160.2	1153.3	1143.8	1136.9	1124.6	1119.1	1116.4	1117.8
35°	1228.6	1219.0	1212.2	1201.2	1191.7	1184.8	1180.7	1180.7
37.5°	1316.2	1307.9	1301.1	1290.2	1276.5	1268.3	1262.8	1266.9
40°	1429.7	1422.9	1409.2	1392.8	1381.8	1375.0	1369.5	1370.9
42.5°	1574.7	1561.0	1548.7	1539.2	1522.7	1513.2	1498.1	1503.6
45°	1758.1	1743.0	1730.7	1715.6	1700.6	1681.4	1676.0	1665.0
47.5°	1979.7	1968.8	1941.4	1927.7	1908.6	1881.2	1867.5	1856.6
50°	2224.6	2204.1	2184.9	2150.7	2128.8	2097.4	2085.0	2080.9
52.5°	2501.0	2466.8	2435.3	2403.8	2360.0	2329.9	2305.3	2310.8
55°	2774.6	2734.9	2689.8	2655.6	2621.4	2584.4	2558.4	2543.4
57.5°	3063.3	3019.5	2971.6	2922.3	2893.6	2849.8	2833.4	2825.2
60°	3360.2	3320.5	3272.6	3227.4	3187.8	3137.1	3109.8	3098.8
62.5°	3688.5	3633.8	3576.3	3520.2	3476.4	3439.5	3410.8	3391.6
65°	3990.9	3915.6	3856.8	3785.6	3737.8	3684.4	3648.8	3642.0
67.5°	4216.6	4100.3	3997.7	3906.0	3832.2	3766.5	3721.3	3703.6
70°	4231.7	4071.6	3919.7	3784.3	3676.2	3600.9	3540.7	3517.5
72.5°	3938.9	3740.5	3535.3	3402.6	3287.6	3183.7	3141.3	3131.7
75°	3204.2	3038.6	2867.6	2717.1	2637.8	2585.8	2550.2	2498.2
77.5°	2226.0	2074.1	1982.4	1814.2	1784.1	1741.6	1706.1	1671.9
80°	1246.4	1113.7	1011.1	905.7	841.4	805.8	768.9	748.4
82.5°	559.6	459.7	365.3	283.2	234.0	184.7	138.2	146.4
85°	139.6	117.7	90.3	75.2	68.4	62.9	50.6	45.1
87.5°	26.0	24.6	21.9	21.9	23.3	19.2	10.9	9.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)