

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: P140288

Luminaire Tested: **ECM-E04-LED-E1-5MQ-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140288
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33686)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-E04-LED-E1-5MQ-8030
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (84) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10309.4 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G2

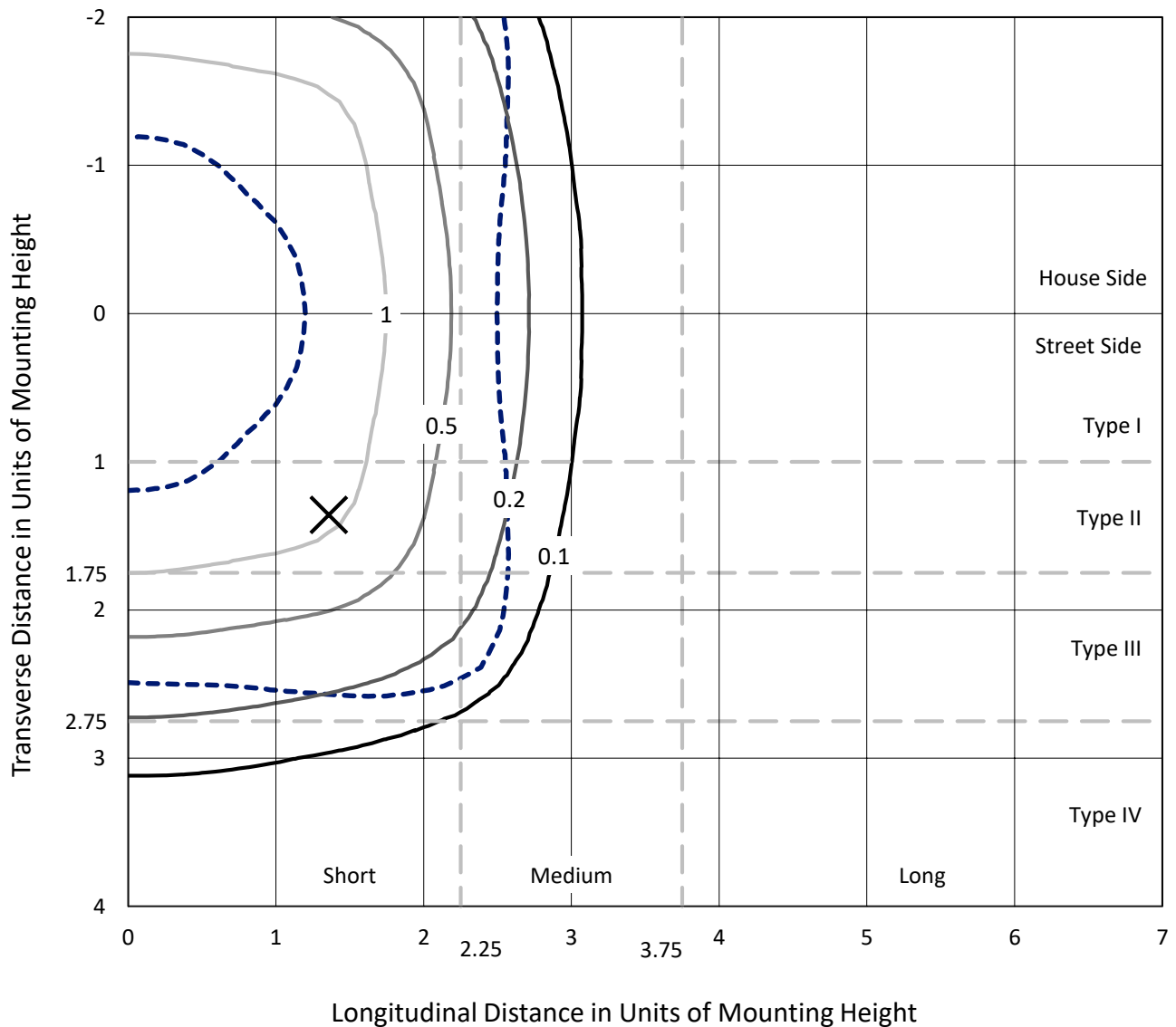
Input Watts (W): 97.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P140288
 CATALOG NUMBER: ECM-E04-LED-E1-5MQ-8030

Iso-Footcandle Lines of Horizontal Illumination

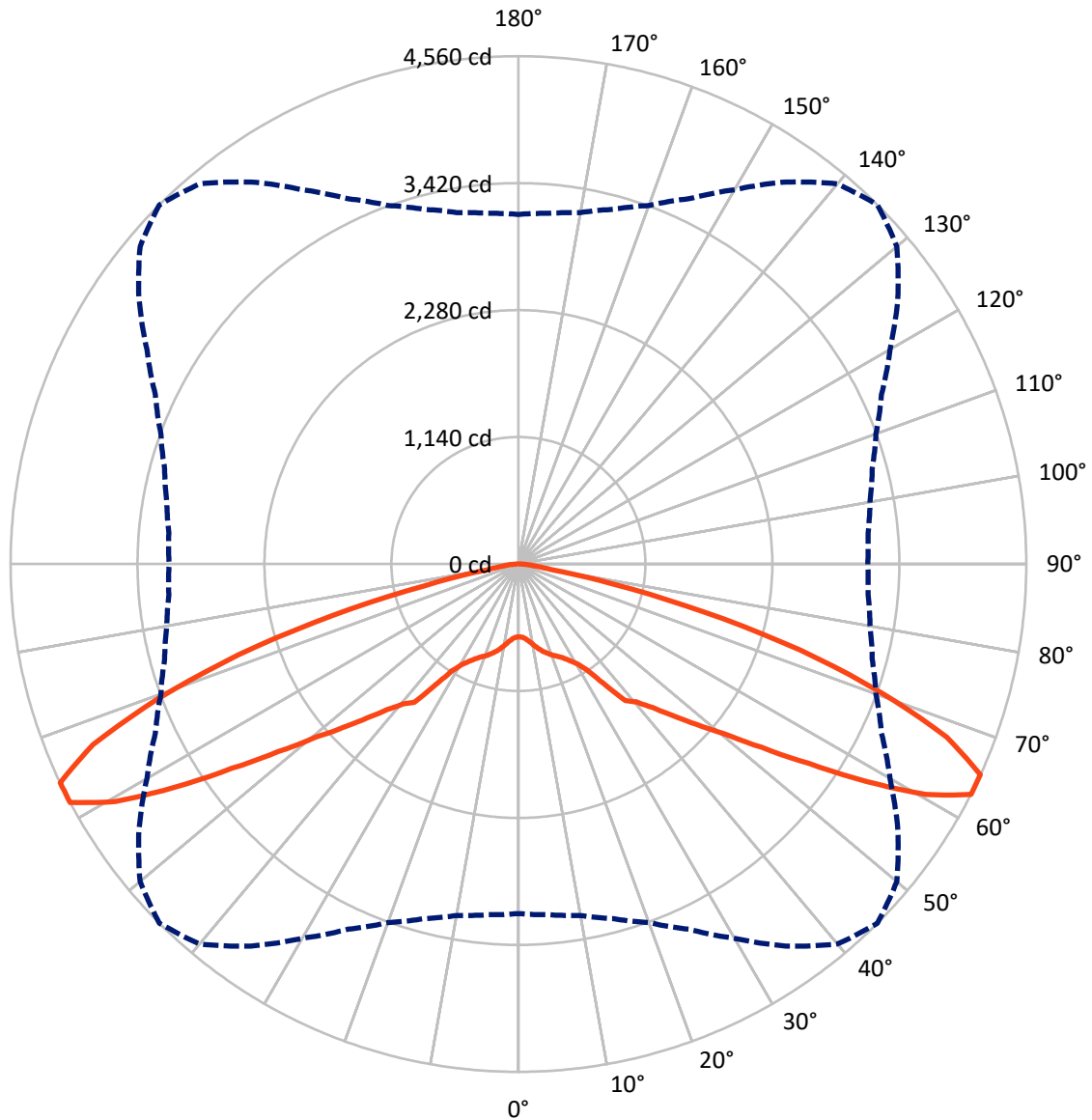
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P140288
CATALOG NUMBER: ECM-E04-LED-E1-5MQ-8030

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P140288

CATALOG NUMBER: ECM-E04-LED-E1-5MQ-8030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5154.7	0.0	5154.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5154.7	0.0	5154.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	10309.4	0.0	10309.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.5	0.6
10°-20°	231.6	2.2
20°-30°	445.0	4.3
30°-40°	856.0	8.3
40°-50°	1489.9	14.5
50°-60°	2676.1	26.0
60°-70°	3280.5	31.8
70°-80°	1156.9	11.2
80°-90°	107.0	1.0
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°	10309.4	100.0
0°-180°	10309.4	100.0



REPORT NUMBER: P140288

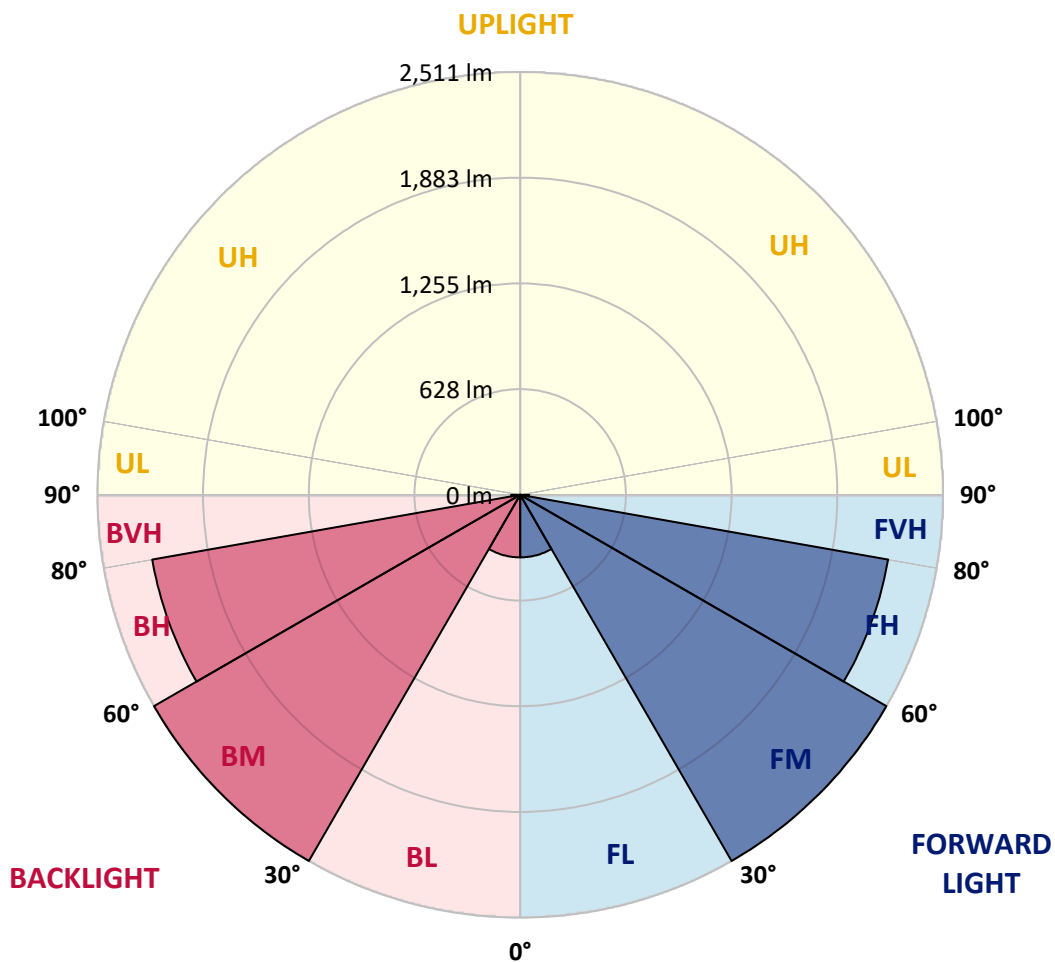
CATALOG NUMBER: ECM-E04-LED-E1-5MQ-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	371.6	3.6			
FM	(30°-60°)	2511.0	24.4			
FH	(60°-80°)	2218.7	21.5			G2/5000
FVH	(80°-90°)	53.5	0.5			G1/100
BL	(0°-30°)	371.6	3.6	B1/500		
BM	(30°-60°)	2511.0	24.4	B3/5000		
BH	(60°-80°)	2218.7	21.5	B3/2500		G2/5000
BVH	(80°-90°)	53.5	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type V Short





REPORT NUMBER: P140288
 CATALOG NUMBER: ECM-E04-LED-E1-5MQ-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8
2.5°	661.7	661.7	660.6	659.4	659.4	659.4	658.3	658.3	659.4	657.2	657.2
5°	678.6	679.7	678.6	677.4	676.3	676.3	675.2	675.2	676.3	674.1	672.9
7.5°	710.1	711.2	709.0	707.8	706.7	705.6	704.5	703.3	704.5	701.1	701.1
10°	750.6	750.6	750.6	746.1	746.1	742.7	741.6	739.3	740.5	737.1	737.1
12.5°	791.1	791.1	790.0	787.7	786.6	784.3	782.1	782.1	779.8	775.3	773.1
15°	827.1	828.2	827.1	823.7	822.6	819.2	819.2	817.0	813.6	811.4	809.1
17.5°	860.9	862.0	858.6	857.5	854.1	851.9	849.6	848.5	846.2	842.9	841.7
20°	893.5	892.4	889.0	884.5	882.3	880.0	877.8	876.6	875.5	873.2	873.2
22.5°	925.0	925.0	921.6	914.9	910.4	908.1	904.8	902.5	900.3	899.1	901.4
25°	972.3	971.2	964.4	957.6	949.8	943.0	938.5	937.4	935.1	935.1	936.3
27.5°	1033.0	1030.8	1020.7	1011.7	1002.7	993.7	988.0	983.5	982.4	981.3	981.3
30°	1109.6	1106.2	1097.2	1085.9	1075.8	1064.6	1053.3	1049.9	1044.3	1039.8	1047.7
32.5°	1255.9	1258.1	1240.1	1217.6	1195.1	1173.7	1154.6	1140.0	1130.9	1132.1	1132.1
35°	1416.8	1417.9	1410.0	1401.0	1394.3	1381.9	1360.5	1342.5	1329.0	1314.4	1321.1
37.5°	1486.5	1487.7	1480.9	1479.8	1484.3	1492.2	1513.6	1529.3	1552.9	1556.3	1549.6
40°	1609.2	1603.6	1594.6	1592.3	1589.0	1600.2	1609.2	1617.1	1620.5	1627.2	1620.5
42.5°	1737.5	1735.2	1728.5	1720.6	1720.6	1722.9	1737.5	1749.9	1757.8	1758.9	1757.8
45°	1881.5	1878.2	1872.5	1871.4	1874.8	1884.9	1895.0	1910.8	1935.6	1936.7	1935.6
47.5°	2040.2	2042.5	2033.5	2036.8	2042.5	2059.3	2087.5	2113.4	2140.4	2150.5	2138.1
50°	2257.4	2249.5	2249.5	2246.1	2260.8	2285.5	2319.3	2349.7	2387.9	2396.9	2377.8
52.5°	2552.2	2535.3	2538.7	2529.7	2537.6	2560.1	2615.2	2662.5	2710.9	2734.5	2697.4
55°	2906.7	2878.6	2881.9	2891.0	2897.7	2936.0	3005.7	3059.7	3150.9	3158.8	3116.0
57.5°	3197.0	3189.2	3193.7	3215.0	3257.8	3324.2	3412.0	3542.5	3655.0	3682.1	3635.9
60°	3302.8	3308.4	3340.0	3396.2	3477.2	3595.4	3766.5	3970.1	4149.1	4203.1	4133.3
62.5°	3138.5	3161.0	3203.8	3297.2	3425.5	3617.9	3880.1	4187.3	4455.1	4559.8	4434.9
65°	2817.8	2832.4	2902.2	2982.1	3147.5	3368.1	3689.9	4089.4	4419.1	4557.6	4418.0
67.5°	2396.9	2425.1	2485.8	2584.9	2727.8	2951.7	3289.3	3697.8	4028.7	4150.2	4027.5
70°	1924.3	1936.7	1974.9	2052.6	2201.1	2399.2	2688.4	3054.1	3376.0	3452.5	3354.6
72.5°	1334.6	1359.4	1392.0	1462.9	1556.3	1724.0	1962.6	2231.5	2490.3	2649.0	2505.0
75°	575.0	542.4	614.4	685.3	800.1	955.4	1142.2	1362.8	1619.3	1725.1	1583.3
77.5°	172.2	171.0	182.3	202.6	243.1	321.8	451.3	599.8	797.9	866.5	743.8
80°	140.7	145.2	149.7	154.2	158.7	164.3	174.4	203.7	249.8	294.8	239.7
82.5°	119.3	124.9	137.3	144.0	147.4	148.5	148.5	147.4	141.8	139.5	138.4
85°	90.0	99.0	115.9	126.0	126.0	126.0	126.0	122.7	114.8	101.3	112.5
87.5°	30.4	40.5	67.5	72.0	74.3	68.6	72.0	73.1	60.8	46.1	58.5
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: P140288

CATALOG NUMBER: ECM-E04-LED-E1-5MQ-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	653.8	653.8	653.8	653.8	653.8	653.8	653.8	653.8
2.5°	657.2	657.2	657.2	658.3	657.2	657.2	657.2	657.2
5°	674.1	672.9	674.1	672.9	674.1	674.1	672.9	674.1
7.5°	699.9	699.9	701.1	701.1	699.9	699.9	699.9	699.9
10°	734.8	732.6	733.7	733.7	733.7	732.6	732.6	731.5
12.5°	770.8	768.6	768.6	768.6	768.6	767.5	768.6	768.6
15°	804.6	802.4	800.1	800.1	801.2	802.4	802.4	801.2
17.5°	837.2	835.0	831.6	831.6	830.5	832.7	835.0	833.9
20°	869.9	868.7	863.1	863.1	863.1	865.4	866.5	869.9
22.5°	902.5	901.4	896.9	895.8	896.9	901.4	904.8	904.8
25°	937.4	939.6	938.5	938.5	940.8	947.5	950.9	955.4
27.5°	986.9	991.4	992.5	997.0	998.2	1006.0	1011.7	1018.4
30°	1051.1	1058.9	1063.4	1071.3	1076.9	1081.4	1089.3	1094.9
32.5°	1140.0	1159.1	1181.6	1207.5	1218.7	1239.0	1248.0	1250.2
35°	1344.8	1365.0	1384.1	1395.4	1390.9	1396.5	1396.5	1401.0
37.5°	1529.3	1509.1	1492.2	1488.8	1479.8	1476.4	1477.5	1480.9
40°	1614.8	1604.7	1598.0	1601.3	1596.8	1593.5	1595.7	1596.8
42.5°	1753.3	1737.5	1731.9	1730.7	1728.5	1730.7	1736.4	1734.1
45°	1915.3	1895.0	1887.2	1886.0	1882.7	1881.5	1883.8	1888.3
47.5°	2110.0	2085.2	2060.5	2052.6	2052.6	2045.8	2050.3	2043.6
50°	2348.5	2308.0	2282.2	2267.5	2258.5	2248.4	2257.4	2242.8
52.5°	2662.5	2605.1	2577.0	2557.9	2532.0	2533.1	2535.3	2529.7
55°	3058.6	2995.6	2940.5	2903.3	2887.6	2878.6	2876.3	2894.3
57.5°	3514.4	3403.0	3315.2	3249.9	3225.2	3191.4	3175.7	3175.7
60°	3947.6	3745.1	3570.6	3461.5	3380.5	3323.1	3284.8	3273.6
62.5°	4159.2	3852.0	3596.5	3416.5	3288.2	3206.0	3150.9	3136.3
65°	4068.0	3677.5	3377.1	3174.5	3026.0	2920.2	2856.1	2838.1
67.5°	3701.2	3292.7	2976.5	2772.8	2613.0	2498.2	2449.8	2429.6
70°	3073.3	2698.5	2423.9	2224.8	2058.2	1961.4	1895.0	1868.0
72.5°	2209.0	1924.3	1672.2	1501.2	1351.5	1300.9	1210.8	1201.8
75°	1305.4	1057.8	849.6	719.1	585.2	512.0	470.4	425.4
77.5°	531.2	379.2	284.7	214.9	184.6	167.7	159.8	157.5
80°	181.2	162.0	153.0	149.7	145.2	142.9	137.3	132.8
82.5°	142.9	141.8	137.3	136.2	131.7	124.9	113.7	106.9
85°	119.3	117.0	111.4	110.3	106.9	97.9	85.5	77.6
87.5°	67.5	61.9	56.3	57.4	54.0	47.3	34.9	24.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)