

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: P140610

Luminaire Tested: **ECM-E04-LED-E1-5XQ**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140610
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33688)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-E04-LED-E1-5XQ
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (84) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11926.1 lumens
Efficiency: N/A
Efficacy: 122.7 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B4 - U0 - G3

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

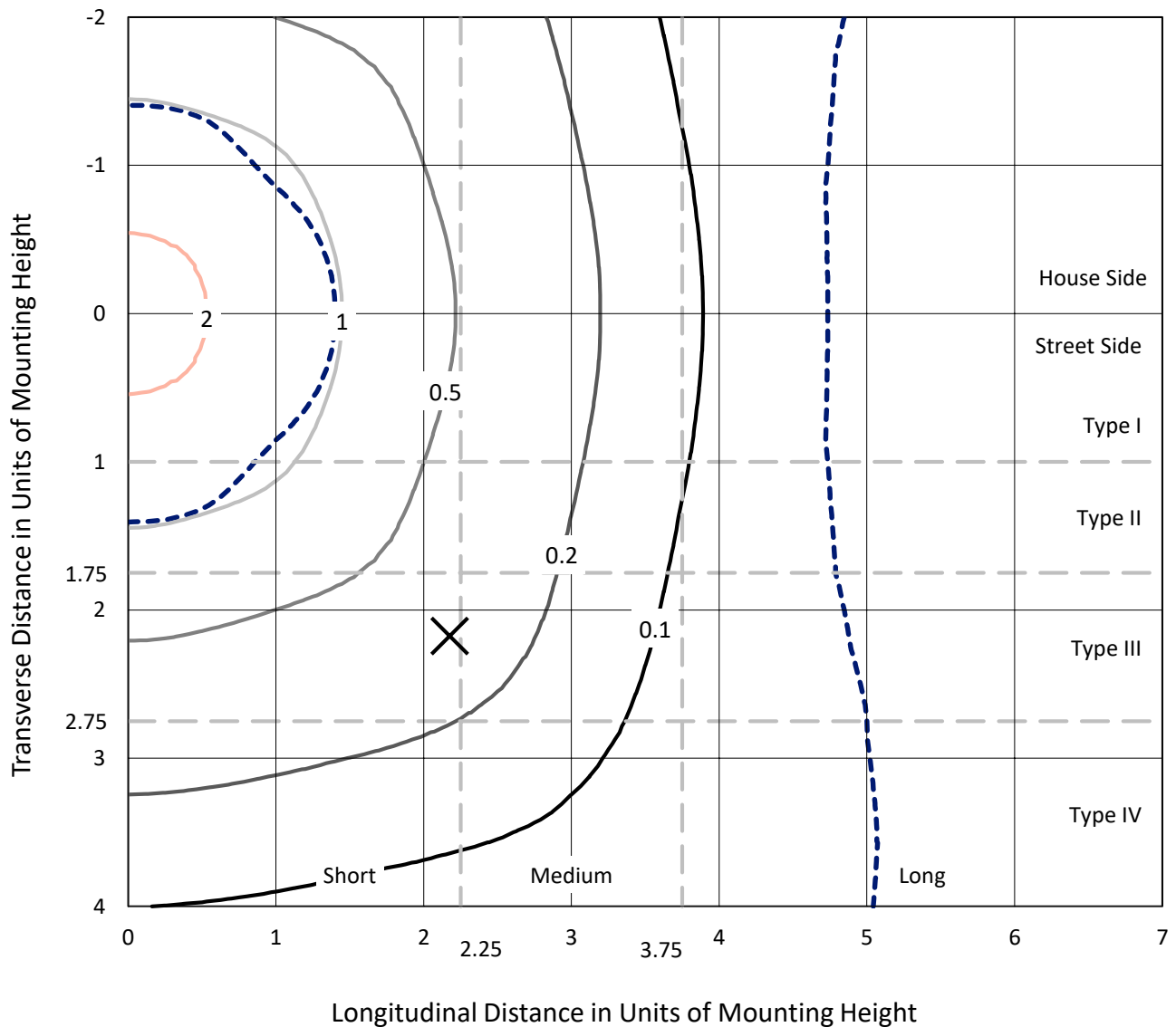


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

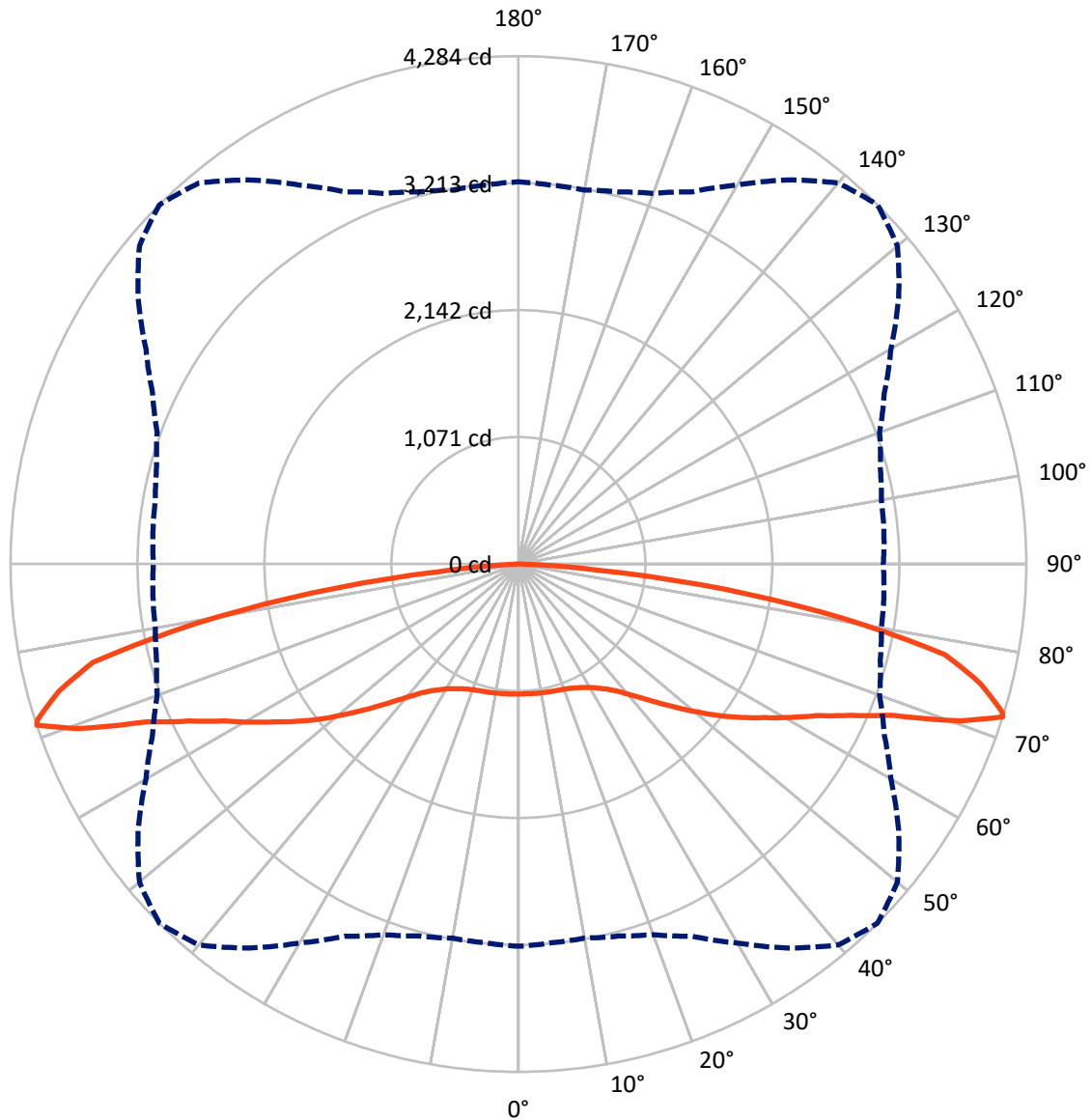


Based on 20 foot mounting height. Maximum calculated value = 2.7 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5963.1	0.0	5963.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5963.1	0.0	5963.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	11926.1	0.0	11926.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.1	0.9
10°-20°	316.4	2.7
20°-30°	535.3	4.5
30°-40°	814.5	6.8
40°-50°	1289.5	10.8
50°-60°	1976.1	16.6
60°-70°	2901.1	24.3
70°-80°	3291.0	27.6
80°-90°	697.1	5.8
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°	11926.1	100.0
0°-180°	11926.1	100.0



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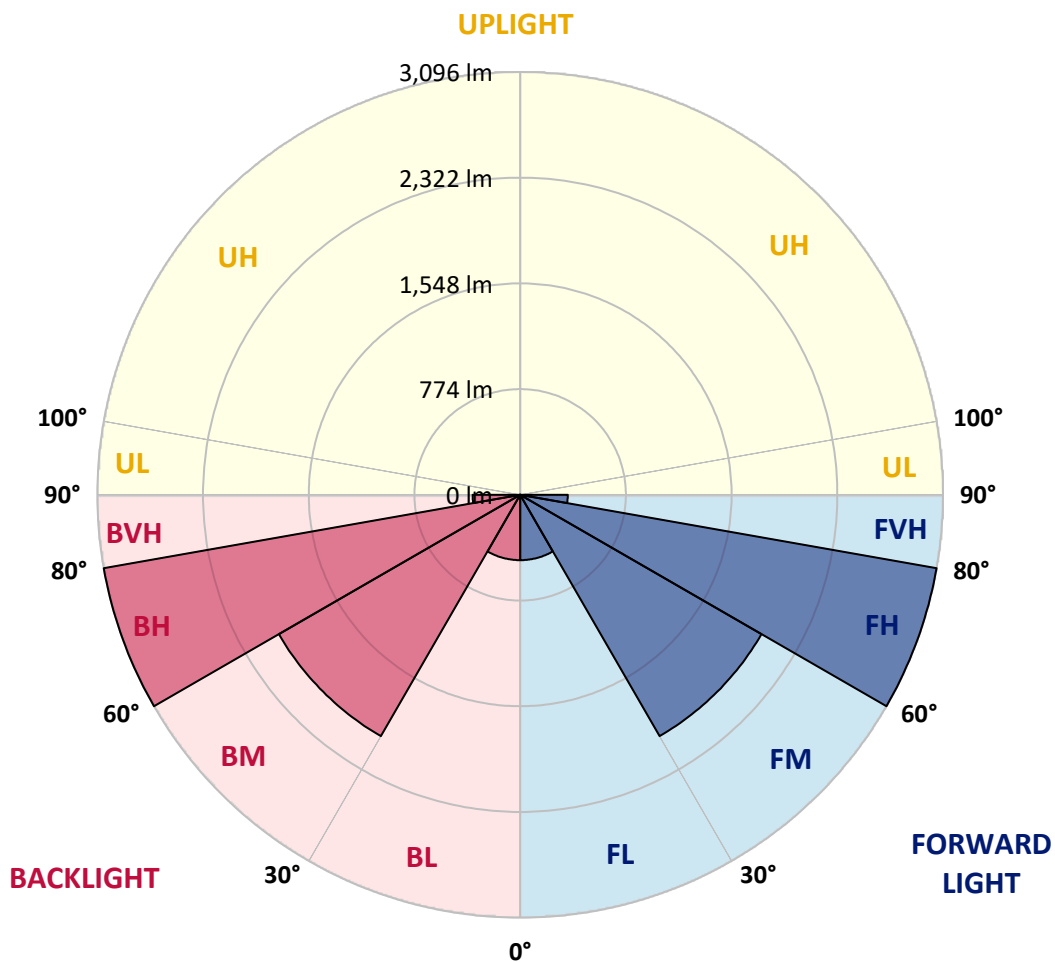
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	478.4	4.0			
FM	(30°-60°)	2040.0	17.1			
FH	(60°-80°)	3096.0	26.0			G2/5000
FVH	(80°-90°)	348.6	2.9			G3/500
BL	(0°-30°)	478.4	4.0	B1/500		
BM	(30°-60°)	2040.0	17.1	B2/2500		
BH	(60°-80°)	3096.0	26.0	B4/5000		G2/5000
BVH	(80°-90°)	348.6	2.9			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1096.0	1096.0	1096.0	1096.0	1096.0	1096.0	1096.0	1096.0	1096.0	1096.0	1096.0
2.5°	1100.0	1101.3	1100.0	1098.7	1098.7	1097.3	1097.3	1097.3	1098.7	1096.0	1096.0
5°	1102.7	1104.0	1102.7	1100.0	1100.0	1100.0	1098.7	1098.7	1100.0	1098.7	1098.7
7.5°	1106.7	1108.0	1106.7	1104.0	1104.0	1102.7	1101.3	1101.3	1104.0	1101.3	1101.3
10°	1110.7	1113.3	1110.7	1108.0	1108.0	1106.7	1105.3	1105.3	1106.7	1104.0	1104.0
12.5°	1117.3	1117.3	1116.0	1114.7	1114.7	1113.3	1112.0	1110.7	1109.3	1108.0	1106.7
15°	1122.7	1124.0	1121.3	1120.0	1118.7	1117.3	1116.0	1116.0	1113.3	1112.0	1112.0
17.5°	1129.3	1130.7	1128.0	1125.3	1125.3	1122.7	1121.3	1121.3	1118.7	1117.3	1116.0
20°	1136.0	1137.3	1134.7	1133.3	1132.0	1130.7	1128.0	1129.3	1128.0	1125.3	1125.3
22.5°	1144.0	1144.0	1142.7	1141.3	1141.3	1140.0	1138.7	1141.3	1138.7	1138.7	1137.3
25°	1152.0	1153.3	1152.0	1152.0	1153.3	1153.3	1154.7	1157.3	1157.3	1156.0	1154.7
27.5°	1169.3	1169.3	1169.3	1169.3	1173.3	1173.3	1174.7	1178.7	1180.0	1180.0	1180.0
30°	1192.0	1193.3	1192.0	1192.0	1196.0	1197.3	1201.3	1205.3	1208.0	1208.0	1209.3
32.5°	1225.3	1224.0	1225.3	1228.0	1230.7	1233.3	1237.3	1244.0	1248.0	1249.3	1249.3
35°	1268.0	1269.3	1268.0	1269.3	1274.7	1278.7	1282.7	1290.7	1293.3	1296.0	1297.3
37.5°	1330.7	1334.7	1332.0	1332.0	1338.7	1341.3	1346.7	1353.3	1358.7	1361.3	1360.0
40°	1421.3	1420.0	1417.3	1418.7	1420.0	1422.7	1428.0	1441.3	1448.0	1448.0	1448.0
42.5°	1525.3	1526.7	1522.7	1521.3	1522.7	1525.3	1533.3	1544.0	1554.7	1552.0	1553.3
45°	1644.0	1634.7	1637.3	1634.7	1636.0	1645.3	1658.7	1664.0	1674.7	1674.7	1677.3
47.5°	1760.0	1756.0	1754.7	1753.3	1757.3	1766.7	1782.7	1800.0	1809.3	1814.7	1818.7
50°	1890.7	1884.0	1882.7	1884.0	1885.3	1888.0	1918.7	1936.0	1958.7	1962.7	1961.3
52.5°	2017.3	2012.0	2009.3	2009.3	2014.7	2024.0	2056.0	2084.0	2109.3	2125.3	2118.7
55°	2154.7	2154.7	2146.7	2144.0	2152.0	2161.3	2205.3	2237.3	2273.3	2285.3	2266.7
57.5°	2296.0	2294.7	2282.7	2278.7	2285.3	2309.3	2346.7	2396.0	2434.7	2445.3	2434.7
60°	2434.7	2434.7	2428.0	2425.3	2432.0	2461.3	2506.7	2561.3	2608.0	2628.0	2610.7
62.5°	2593.3	2593.3	2576.0	2584.0	2593.3	2616.0	2673.3	2744.0	2806.7	2817.3	2801.3
65°	2773.3	2781.3	2768.0	2765.3	2777.3	2820.0	2885.3	2974.7	3048.0	3076.0	3052.0
67.5°	3048.0	3036.0	3020.0	3013.3	3032.0	3072.0	3152.0	3269.3	3377.3	3404.0	3376.0
70°	3333.3	3321.3	3316.0	3337.3	3377.3	3461.3	3584.0	3748.0	3898.7	3962.7	3904.0
72°	3224.0	3208.0	3204.0	3249.3	3326.7	3464.0	3690.7	3954.7	4194.7	4284.0	4173.3
72.5°	3168.0	3154.7	3153.3	3196.0	3280.0	3418.7	3641.3	3913.3	4170.7	4268.0	4149.3
75°	2941.3	2928.0	2941.3	2989.3	3073.3	3222.7	3449.3	3704.0	3936.0	4025.3	3909.3
77.5°	2628.0	2604.0	2616.0	2682.7	2776.0	2938.7	3178.7	3480.0	3704.0	3680.0	3508.0
80°	2097.3	2044.0	2101.3	2121.3	2228.0	2337.3	2569.3	2704.0	2781.3	2785.3	2662.7
82.5°	916.0	937.3	1009.3	1069.3	1145.3	1272.0	1365.3	1510.7	1680.0	1758.7	1664.0
85°	60.0	74.7	118.7	141.3	196.0	238.7	342.7	498.7	601.3	688.0	580.0
87.5°	10.7	14.7	26.7	32.0	34.7	38.7	38.7	53.3	56.0	45.3	50.7
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1096.0	1096.0	1096.0	1096.0	1096.0	1096.0	1096.0	1096.0
2.5°	1096.0	1096.0	1097.3	1096.0	1096.0	1096.0	1094.7	1094.7
5°	1097.3	1097.3	1098.7	1098.7	1097.3	1097.3	1097.3	1097.3
7.5°	1101.3	1100.0	1101.3	1101.3	1100.0	1100.0	1098.7	1100.0
10°	1102.7	1102.7	1104.0	1104.0	1102.7	1102.7	1102.7	1102.7
12.5°	1106.7	1106.7	1106.7	1108.0	1106.7	1106.7	1108.0	1106.7
15°	1110.7	1109.3	1109.3	1109.3	1109.3	1110.7	1110.7	1112.0
17.5°	1114.7	1114.7	1113.3	1114.7	1114.7	1116.0	1116.0	1116.0
20°	1122.7	1121.3	1118.7	1121.3	1121.3	1121.3	1121.3	1122.7
22.5°	1134.7	1132.0	1129.3	1129.3	1128.0	1129.3	1128.0	1128.0
25°	1152.0	1148.0	1144.0	1142.7	1141.3	1140.0	1138.7	1140.0
27.5°	1177.3	1172.0	1166.7	1164.0	1162.7	1160.0	1158.7	1158.7
30°	1205.3	1201.3	1193.3	1190.7	1186.7	1182.7	1182.7	1181.3
32.5°	1248.0	1242.7	1233.3	1229.3	1222.7	1218.7	1217.3	1217.3
35°	1292.0	1285.3	1281.3	1276.0	1268.0	1264.0	1262.7	1262.7
37.5°	1358.7	1350.7	1345.3	1338.7	1337.3	1332.0	1332.0	1332.0
40°	1445.3	1438.7	1432.0	1426.7	1422.7	1418.7	1413.3	1413.3
42.5°	1552.0	1541.3	1537.3	1530.7	1525.3	1521.3	1518.7	1518.7
45°	1669.3	1660.0	1654.7	1645.3	1644.0	1641.3	1636.0	1636.0
47.5°	1801.3	1788.0	1777.3	1774.7	1768.0	1761.3	1758.7	1760.0
50°	1945.3	1922.7	1908.0	1908.0	1900.0	1890.7	1892.0	1890.7
52.5°	2093.3	2068.0	2049.3	2036.0	2026.7	2025.3	2026.7	2025.3
55°	2242.7	2216.0	2193.3	2178.7	2169.3	2160.0	2158.7	2158.7
57.5°	2397.3	2364.0	2328.0	2314.7	2305.3	2300.0	2300.0	2301.3
60°	2572.0	2517.3	2472.0	2454.7	2448.0	2450.7	2449.3	2450.7
62.5°	2749.3	2686.7	2633.3	2613.3	2604.0	2602.7	2613.3	2617.3
65°	2973.3	2896.0	2836.0	2798.7	2798.7	2794.7	2806.7	2801.3
67.5°	3265.3	3156.0	3082.7	3022.7	3024.0	3028.0	3045.3	3044.0
70°	3762.7	3569.3	3433.3	3330.7	3290.7	3264.0	3258.7	3258.7
72°	3916.0	3628.0	3404.0	3242.7	3160.0	3109.3	3094.7	3078.7
72.5°	3876.0	3580.0	3353.3	3185.3	3100.0	3049.3	3026.7	3006.7
75°	3624.0	3293.3	3046.7	2870.7	2776.0	2714.7	2702.7	2693.3
77.5°	3197.3	2904.0	2649.3	2466.7	2372.0	2293.3	2261.3	2258.7
80°	2465.3	2201.3	2005.3	1862.7	1777.3	1718.7	1721.3	1702.7
82.5°	1454.7	1232.0	1064.0	873.3	748.0	676.0	630.7	625.3
85°	428.0	290.7	185.3	133.3	96.0	72.0	53.3	48.0
87.5°	38.7	30.7	25.3	21.3	20.0	17.3	10.7	8.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)