

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: P140287

Luminaire Tested: **ECM-F03-LED-E1-5MQ-7060**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140287
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-F03-LED-E1-5MQ-7060
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (21) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7760.3 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

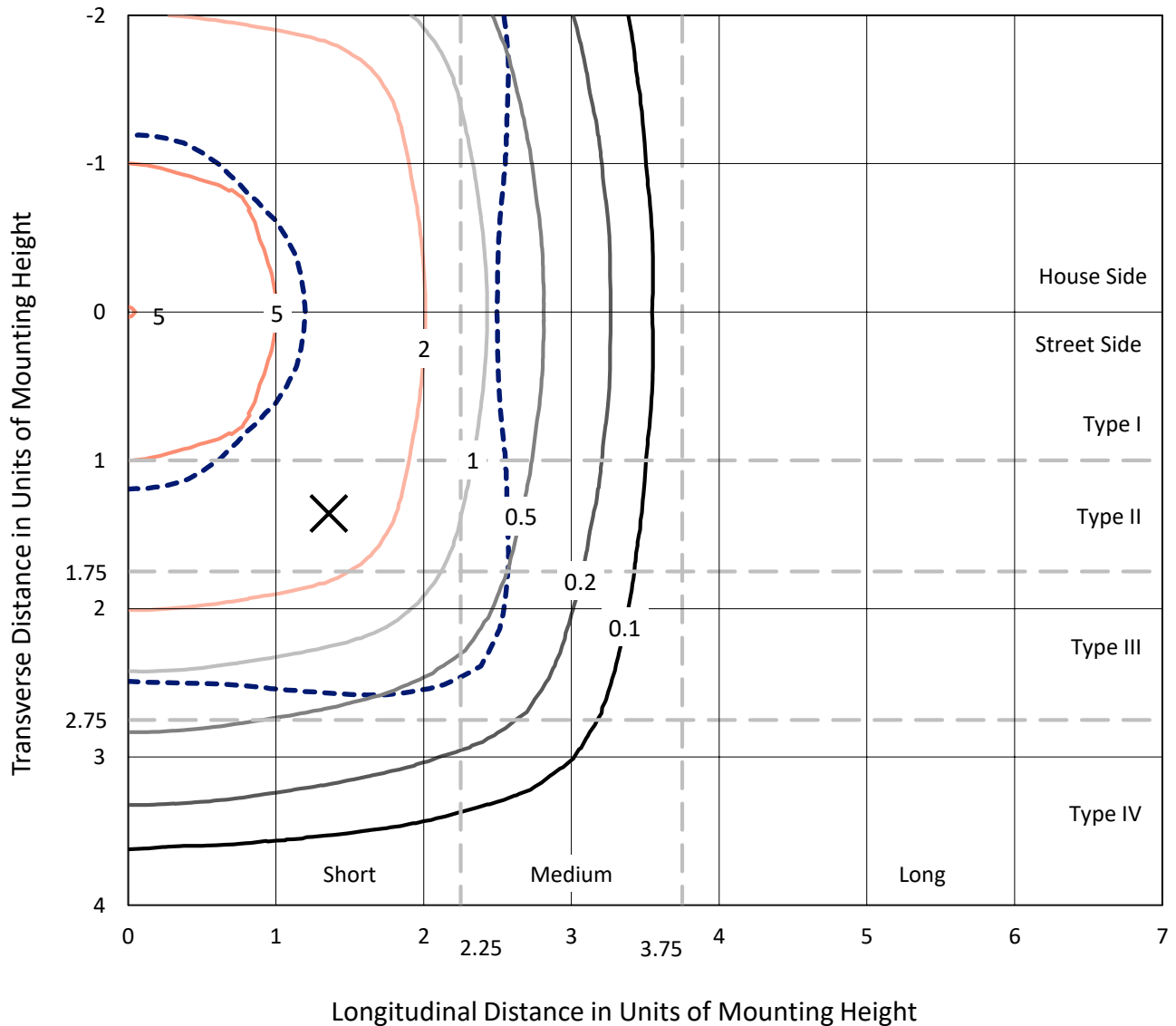
Input Watts (W): 78.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

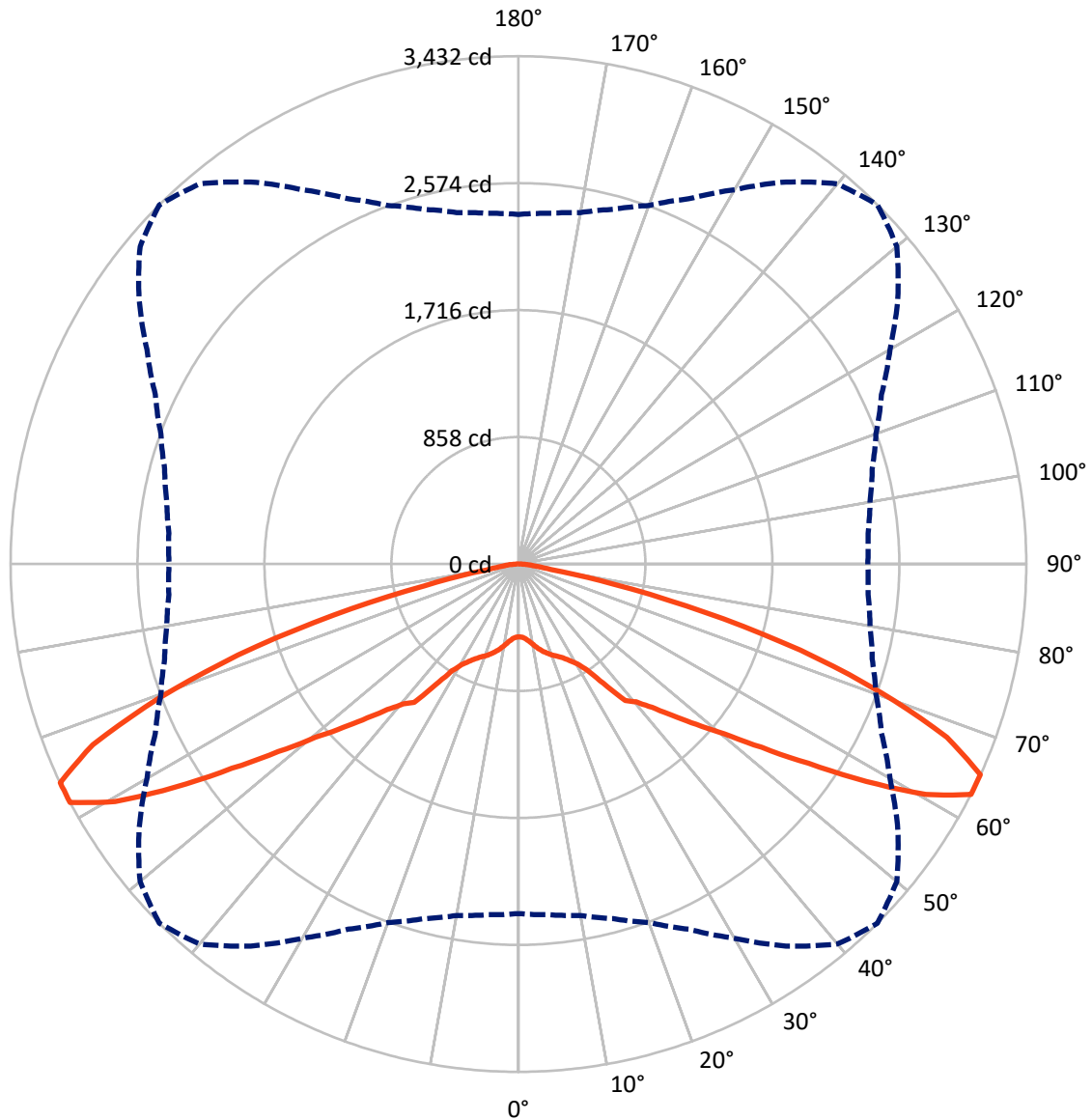
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.7 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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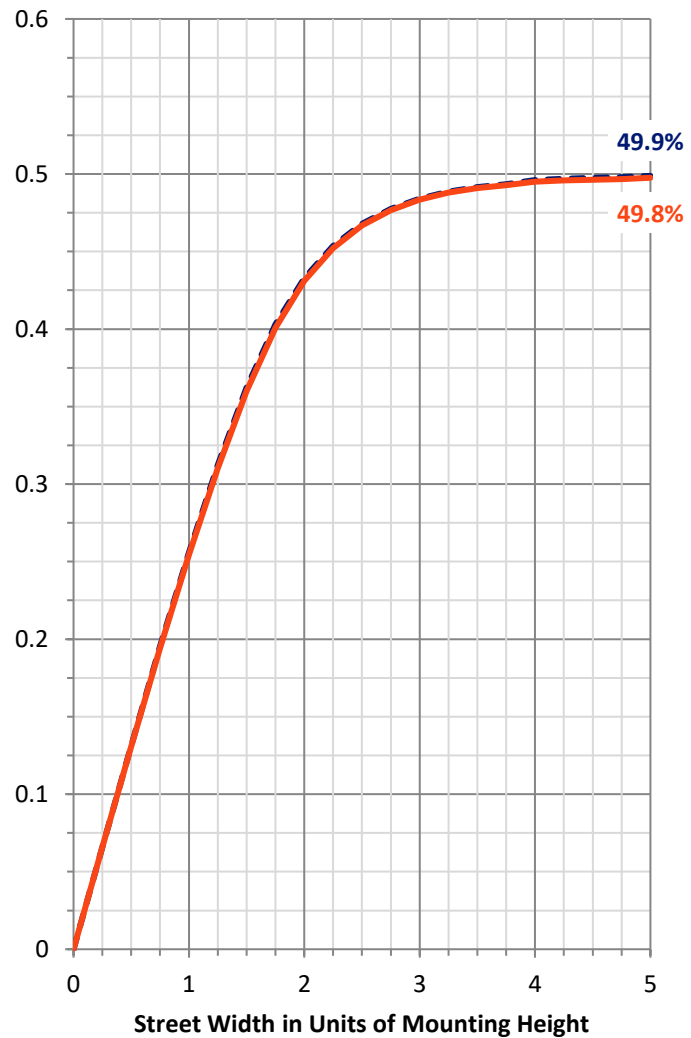
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3880.2	0.0	3880.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3880.2	0.0	3880.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	7760.3	0.0	7760.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.1	0.6
10°-20°	174.3	2.2
20°-30°	335.0	4.3
30°-40°	644.4	8.3
40°-50°	1121.5	14.5
50°-60°	2014.4	26.0
60°-70°	2469.3	31.8
70°-80°	870.8	11.2
80°-90°	80.5	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°	7760.3	100.0
0°-180°	7760.3	100.0



--- HS — SS

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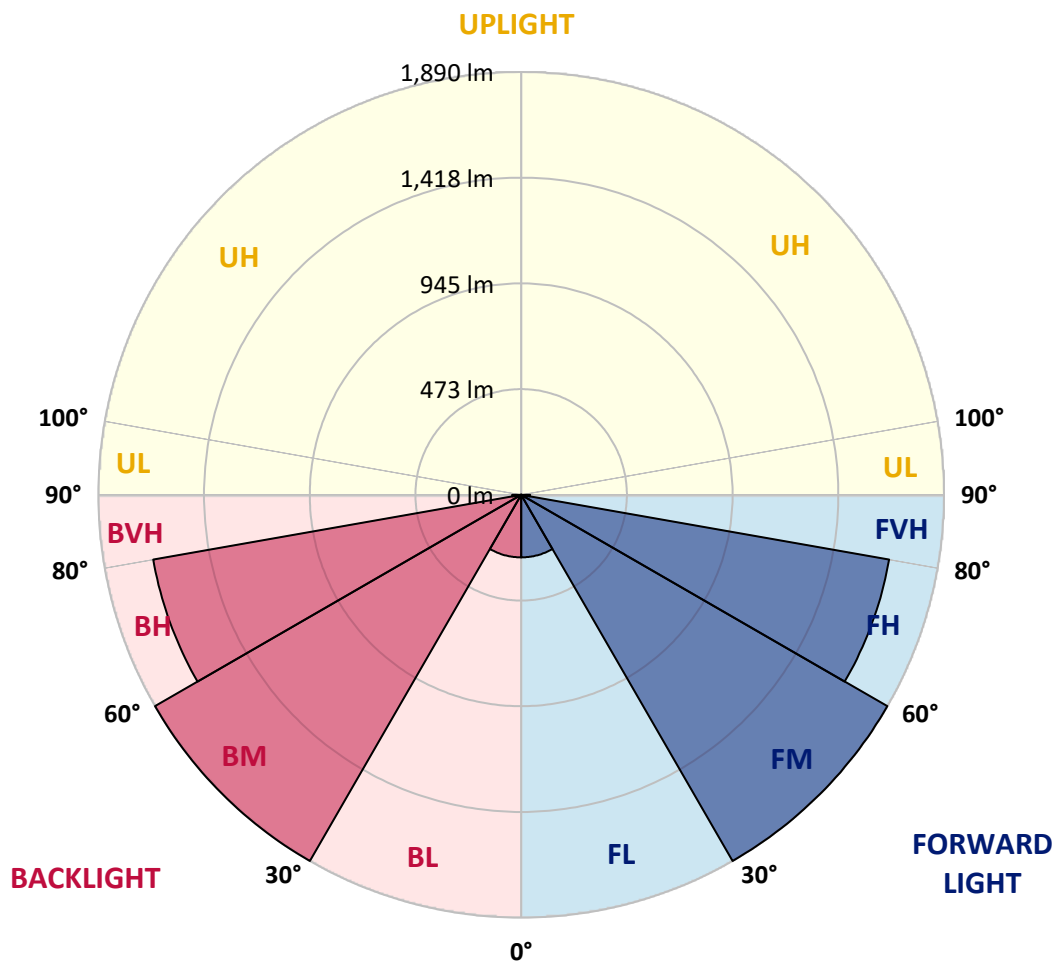
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	279.7	3.6			
FM	(30°-60°)	1890.1	24.4			
FH	(60°-80°)	1670.1	21.5			G1/1800
FVH	(80°-90°)	40.3	0.5			G1/100
BL	(0°-30°)	279.7	3.6	B1/500		
BM	(30°-60°)	1890.1	24.4	B2/2500		
BH	(60°-80°)	1670.1	21.5	B3/2500		G1/1800
BVH	(80°-90°)	40.3	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-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	492.2	492.2	492.2	492.2	492.2	492.2	492.2	492.2	492.2	492.2	492.2
2.5°	498.1	498.1	497.2	496.4	496.4	496.4	495.5	495.5	496.4	494.7	494.7
5°	510.8	511.6	510.8	509.9	509.1	509.1	508.2	508.2	509.1	507.4	506.6
7.5°	534.5	535.4	533.7	532.8	532.0	531.1	530.3	529.4	530.3	527.7	527.7
10°	565.0	565.0	565.0	561.6	561.6	559.1	558.2	556.5	557.4	554.8	554.8
12.5°	595.5	595.5	594.6	593.0	592.1	590.4	588.7	588.7	587.0	583.6	581.9
15°	622.6	623.4	622.6	620.1	619.2	616.7	616.7	615.0	612.4	610.7	609.0
17.5°	648.0	648.9	646.3	645.5	642.9	641.2	639.5	638.7	637.0	634.5	633.6
20°	672.6	671.7	669.2	665.8	664.1	662.4	660.7	659.9	659.0	657.3	657.3
22.5°	696.3	696.3	693.8	688.7	685.3	683.6	681.0	679.4	677.7	676.8	678.5
25°	731.9	731.0	725.9	720.9	714.9	709.8	706.5	705.6	703.9	703.9	704.8
27.5°	777.6	775.9	768.3	761.5	754.7	748.0	743.7	740.3	739.5	738.6	738.6
30°	835.2	832.7	825.9	817.4	809.8	801.3	792.9	790.3	786.1	782.7	788.6
32.5°	945.3	947.0	933.5	916.5	899.6	883.5	869.1	858.1	851.3	852.2	852.2
35°	1066.5	1067.3	1061.4	1054.6	1049.5	1040.2	1024.1	1010.6	1000.4	989.4	994.5
37.5°	1119.0	1119.8	1114.8	1113.9	1117.3	1123.2	1139.3	1151.2	1169.0	1171.5	1166.4
40°	1211.3	1207.1	1200.3	1198.6	1196.1	1204.5	1211.3	1217.2	1219.8	1224.9	1219.8
42.5°	1307.9	1306.2	1301.1	1295.2	1295.2	1296.9	1307.9	1317.2	1323.1	1324.0	1323.1
45°	1416.3	1413.8	1409.5	1408.7	1411.2	1418.9	1426.5	1438.3	1457.0	1457.8	1457.0
47.5°	1535.7	1537.4	1530.7	1533.2	1537.4	1550.1	1571.3	1590.8	1611.1	1618.8	1609.4
50°	1699.2	1693.3	1693.3	1690.8	1701.8	1720.4	1745.8	1768.7	1797.5	1804.3	1789.9
52.5°	1921.2	1908.5	1911.0	1904.2	1910.2	1927.1	1968.6	2004.2	2040.6	2058.4	2030.4
55°	2188.0	2166.8	2169.4	2176.1	2181.2	2210.0	2262.5	2303.2	2371.8	2377.7	2345.6
57.5°	2406.5	2400.6	2404.0	2420.1	2452.3	2502.3	2568.3	2666.6	2751.3	2771.6	2736.9
60°	2486.2	2490.4	2514.1	2556.5	2617.5	2706.4	2835.2	2988.5	3123.2	3163.8	3111.3
62.5°	2362.5	2379.4	2411.6	2481.9	2578.5	2723.3	2920.7	3152.0	3353.6	3432.4	3338.3
65°	2121.1	2132.1	2184.6	2244.8	2369.3	2535.3	2777.6	3078.3	3326.5	3430.7	3325.6
67.5°	1804.3	1825.4	1871.2	1945.7	2053.3	2221.9	2476.0	2783.5	3032.5	3124.0	3031.7
70°	1448.5	1457.8	1486.6	1545.1	1656.9	1806.0	2023.7	2299.0	2541.2	2598.8	2525.1
72.5°	1004.6	1023.3	1047.8	1101.2	1171.5	1297.7	1477.3	1679.8	1874.6	1994.0	1885.6
75°	432.9	408.3	462.5	515.9	602.3	719.2	859.8	1025.8	1218.9	1298.6	1191.8
77.5°	129.6	128.8	137.2	152.5	183.0	242.3	339.7	451.5	600.6	652.2	559.9
80°	105.9	109.3	112.7	116.0	119.4	123.7	131.3	153.3	188.1	221.9	180.4
82.5°	89.8	94.0	103.3	108.4	111.0	111.8	111.8	111.0	106.7	105.0	104.2
85°	67.8	74.5	87.2	94.9	94.9	94.9	94.9	92.3	86.4	76.2	84.7
87.5°	22.9	30.5	50.8	54.2	55.9	51.7	54.2	55.1	45.7	34.7	44.0
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°	492.2	492.2	492.2	492.2	492.2	492.2	492.2	492.2
2.5°	494.7	494.7	494.7	495.5	494.7	494.7	494.7	494.7
5°	507.4	506.6	507.4	506.6	507.4	507.4	506.6	507.4
7.5°	526.9	526.9	527.7	527.7	526.9	526.9	526.9	526.9
10°	553.1	551.4	552.3	552.3	552.3	551.4	551.4	550.6
12.5°	580.2	578.6	578.6	578.6	578.6	577.7	578.6	578.6
15°	605.7	604.0	602.3	602.3	603.1	604.0	604.0	603.1
17.5°	630.2	628.5	626.0	626.0	625.1	626.8	628.5	627.7
20°	654.8	653.9	649.7	649.7	649.7	651.4	652.2	654.8
22.5°	679.4	678.5	675.1	674.3	675.1	678.5	681.0	681.0
25°	705.6	707.3	706.5	706.5	708.2	713.2	715.8	719.2
27.5°	742.9	746.3	747.1	750.5	751.4	757.3	761.5	766.6
30°	791.2	797.1	800.5	806.4	810.7	814.0	820.0	824.2
32.5°	858.1	872.5	889.4	908.9	917.4	932.6	939.4	941.1
35°	1012.3	1027.5	1041.9	1050.4	1047.0	1051.2	1051.2	1054.6
37.5°	1151.2	1135.9	1123.2	1120.7	1113.9	1111.4	1112.2	1114.8
40°	1215.6	1207.9	1202.8	1205.4	1202.0	1199.5	1201.2	1202.0
42.5°	1319.7	1307.9	1303.6	1302.8	1301.1	1302.8	1307.0	1305.3
45°	1441.7	1426.5	1420.5	1419.7	1417.2	1416.3	1418.0	1421.4
47.5°	1588.3	1569.6	1551.0	1545.1	1545.1	1540.0	1543.4	1538.3
50°	1767.8	1737.4	1717.9	1706.9	1700.1	1692.5	1699.2	1688.2
52.5°	2004.2	1961.0	1939.8	1925.4	1905.9	1906.8	1908.5	1904.2
55°	2302.4	2254.9	2213.4	2185.5	2173.6	2166.8	2165.1	2178.7
57.5°	2645.4	2561.6	2495.5	2446.4	2427.7	2402.3	2390.4	2390.4
60°	2971.5	2819.1	2687.8	2605.6	2544.6	2501.4	2472.6	2464.1
62.5°	3130.8	2899.5	2707.3	2571.7	2475.2	2413.3	2371.8	2360.8
65°	3062.2	2768.2	2542.1	2389.6	2277.8	2198.2	2149.9	2136.3
67.5°	2786.0	2478.5	2240.5	2087.2	1966.9	1880.5	1844.1	1828.8
70°	2313.4	2031.3	1824.6	1674.7	1549.3	1476.5	1426.5	1406.1
72.5°	1662.8	1448.5	1258.8	1130.0	1017.3	979.2	911.5	904.7
75°	982.6	796.3	639.5	541.3	440.5	385.4	354.1	320.2
77.5°	399.8	285.5	214.3	161.8	138.9	126.2	120.3	118.6
80°	136.4	122.0	115.2	112.7	109.3	107.6	103.3	100.0
82.5°	107.6	106.7	103.3	102.5	99.1	94.0	85.6	80.5
85°	89.8	88.1	83.9	83.0	80.5	73.7	64.4	58.4
87.5°	50.8	46.6	42.4	43.2	40.7	35.6	26.3	18.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)