

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: LUMARK

Report Number: P233483

Luminaire Tested: **VRDN-C01-D-UNV-T2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233483
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1710-389-10)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: VRDN-C01-D-UNV-T2
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1230mA LED AND TYPE II OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7154 lumens
Efficiency: N/A
Efficacy: 127.7 lumens/watt
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 56
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

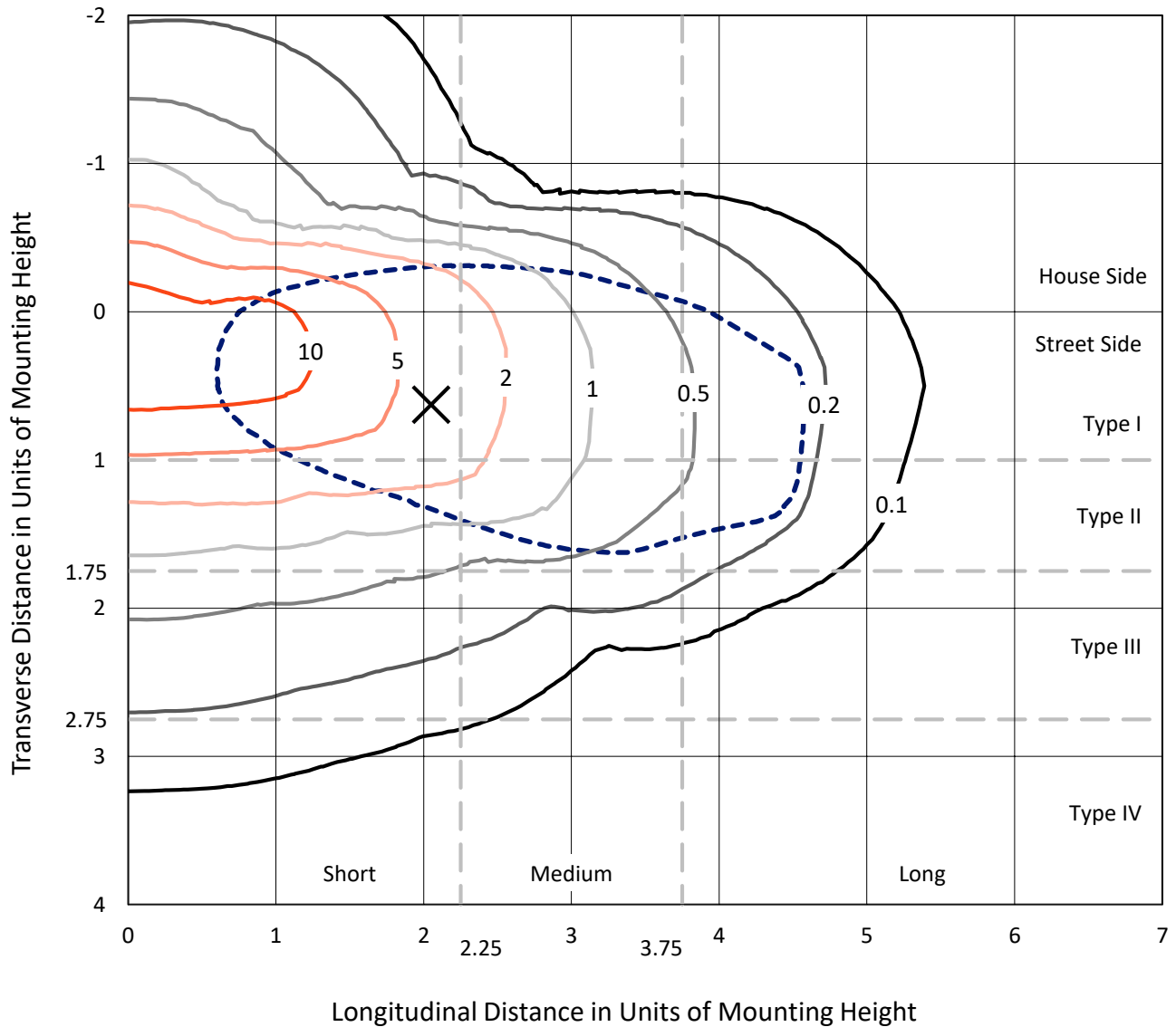


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

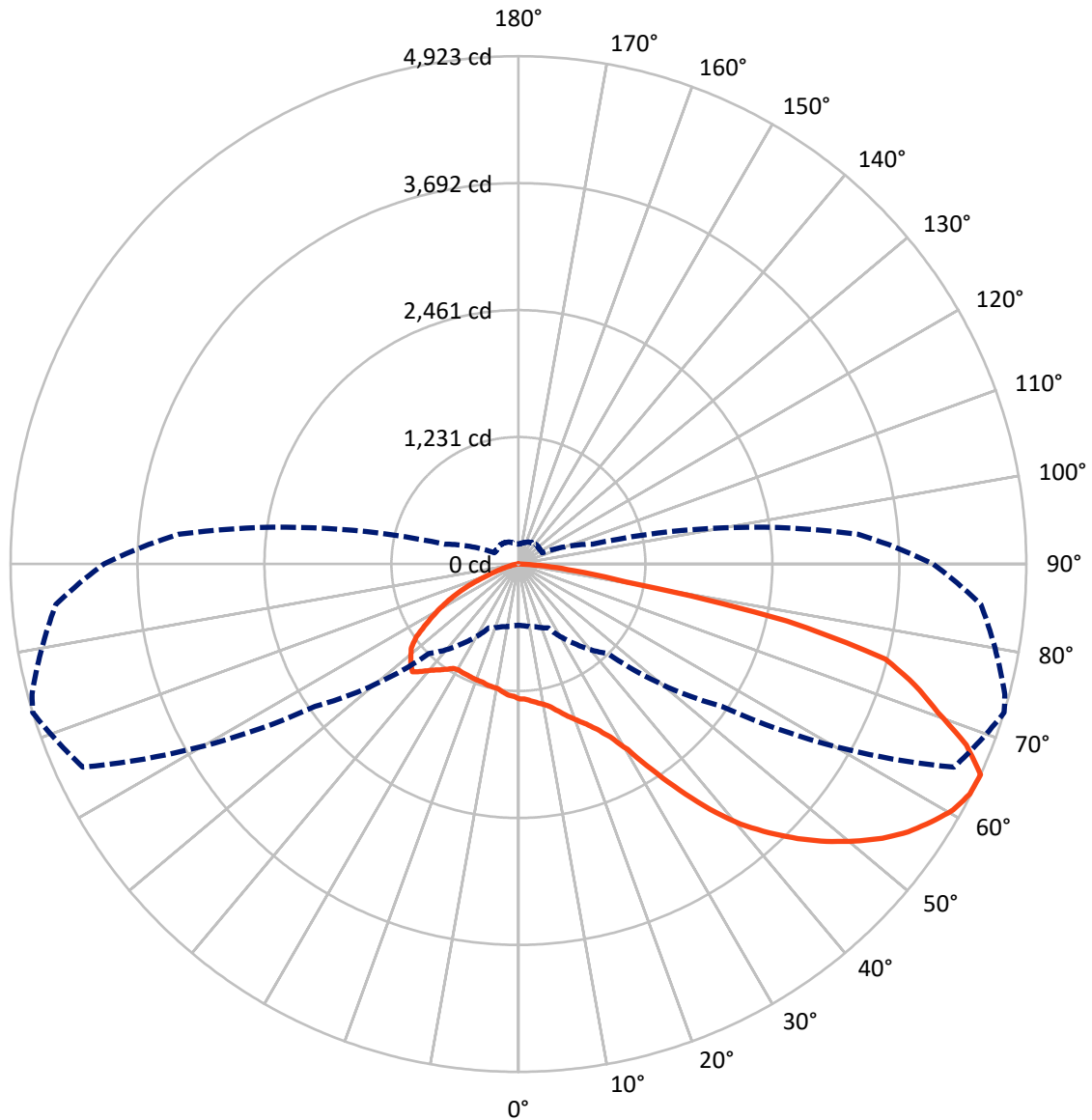


Based on 10 foot mounting height. Maximum calculated value = 15.2 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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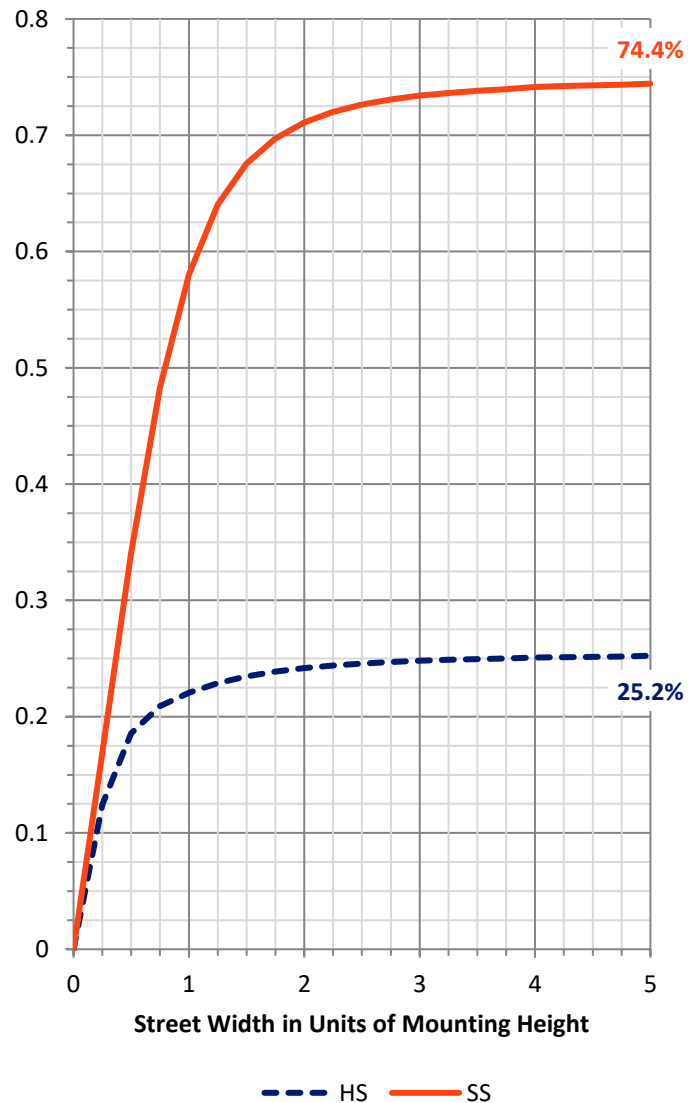
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1833.9	0.0	1833.9
	% Fixture	25.6	0.0	25.6
Street Side	Lumens	5320.1	0.0	5320.1
	% Fixture	74.4	0.0	74.4
Total	Lumens	7154.0	0.0	7154.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.8	1.7
10°-20°	377.4	5.3
20°-30°	633.1	8.8
30°-40°	928.4	13.0
40°-50°	1254.8	17.5
50°-60°	1453.6	20.3
60°-70°	1419.9	19.8
70°-80°	852.7	11.9
80°-90°	109.2	1.5
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°	7154.0	100.0
0°-180°	7154.0	100.0



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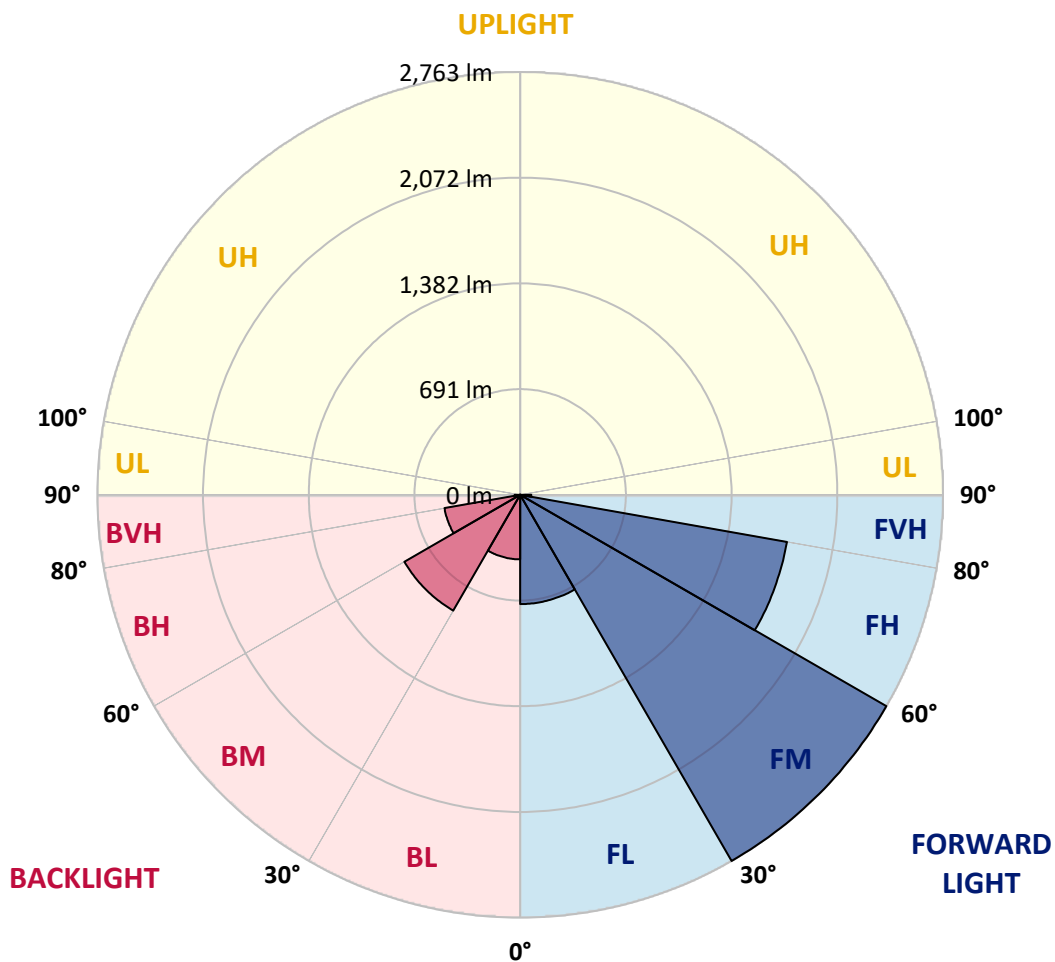
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	713.8	10.0			
FM (30°-60°)	2763.1	38.6			
FH (60°-80°)	1770.5	24.7			G1/1800
FVH (80°-90°)	72.7	1.0			G1/100
BL (0°-30°)	421.5	5.9	B1/500		
BM (30°-60°)	873.8	12.2	B1/1000		
BH (60°-80°)	502.1	7.0	B2/1000		G2/1000
BVH (80°-90°)	36.5	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1308.1	1308.1	1308.1	1308.1	1308.1	1308.1	1308.1	1308.1	1308.1	1308.1	1308.1
2.5°	1388.6	1393.8	1388.0	1371.1	1362.7	1356.8	1339.3	1323.7	1311.4	1310.1	1298.4
5°	1441.9	1449.7	1440.0	1418.5	1410.1	1397.7	1378.3	1356.8	1334.7	1330.2	1306.8
7.5°	1509.5	1510.7	1505.6	1484.1	1466.6	1440.6	1406.8	1384.1	1358.8	1351.6	1314.6
10°	1566.6	1566.0	1559.5	1538.7	1521.1	1498.4	1451.0	1414.0	1384.1	1375.0	1323.7
12.5°	1621.2	1619.9	1613.4	1591.9	1569.9	1551.0	1515.3	1465.3	1425.0	1413.3	1349.7
15°	1688.7	1685.5	1675.1	1646.5	1629.0	1606.9	1580.9	1530.9	1484.8	1468.5	1387.3
17.5°	1740.7	1740.0	1732.2	1708.2	1687.4	1663.4	1639.4	1600.4	1550.4	1532.2	1424.4
20°	1770.6	1768.0	1766.0	1747.2	1742.0	1729.0	1694.6	1664.7	1614.7	1595.8	1465.9
22.5°	1802.4	1803.0	1803.7	1793.9	1808.9	1797.8	1772.5	1736.1	1685.5	1664.0	1524.4
25°	1809.5	1810.8	1823.8	1845.2	1863.4	1883.6	1865.4	1829.7	1775.1	1752.4	1604.3
27.5°	1789.4	1794.6	1833.6	1869.9	1934.2	1960.2	1957.0	1955.0	1899.2	1876.4	1714.0
30°	1807.6	1807.6	1834.2	1896.6	1977.7	2045.9	2060.9	2102.4	2085.6	2069.3	1898.5
32.5°	1753.0	1762.8	1810.2	1897.2	2025.8	2125.2	2192.7	2308.3	2375.2	2361.6	2159.6
35°	1650.4	1663.4	1732.9	1866.0	2049.8	2218.7	2339.5	2562.3	2691.6	2707.8	2474.0
37.5°	1571.2	1582.2	1669.2	1817.3	2058.9	2306.4	2509.0	2848.1	3015.0	3006.6	2740.3
40°	1474.4	1493.9	1581.5	1759.5	2037.5	2381.1	2692.8	3110.5	3315.7	3276.8	2993.6
42.5°	1387.3	1404.2	1477.6	1667.3	2007.6	2423.3	2859.1	3380.7	3560.6	3529.4	3233.2
45°	1295.1	1310.1	1378.3	1556.9	1938.1	2444.1	3015.0	3639.2	3795.7	3760.6	3455.4
47.5°	1189.2	1209.4	1290.6	1452.9	1836.2	2431.1	3128.7	3863.9	4019.1	3993.2	3639.2
50°	922.3	943.1	1155.5	1355.5	1694.6	2377.2	3230.6	4088.6	4221.1	4196.5	3801.6
52.5°	837.2	846.3	912.6	1243.8	1547.1	2270.7	3294.3	4273.7	4417.9	4393.3	3954.8
55°	785.3	791.7	828.8	1015.8	1421.8	2099.2	3302.1	4466.0	4583.6	4551.1	4117.9
57.5°	732.0	739.1	780.1	876.2	1295.8	1831.0	3219.6	4629.0	4718.0	4682.9	4273.7
60°	687.2	691.1	731.3	797.6	1153.5	1564.7	3007.2	4740.1	4842.1	4796.6	4426.4
62.5°	646.3	651.5	680.7	741.1	1034.0	1365.3	2711.0	4740.7	4910.3	4882.3	4503.7
65°	593.0	600.8	629.4	683.9	937.2	1228.9	2404.5	4658.3	4922.6	4881.0	4499.8
67.5°	531.3	541.0	567.0	610.5	808.6	1083.4	1977.1	4549.8	4681.6	4674.5	4314.0
70°	469.6	469.6	498.8	533.9	670.9	927.5	1562.1	4163.3	4314.0	4325.1	3980.8
72.5°	396.2	397.5	420.2	450.8	540.4	761.2	1137.9	3559.3	4021.7	3887.9	3590.5
75°	332.5	331.2	354.6	380.0	439.7	599.5	742.4	2614.9	3675.6	3705.4	3159.8
77.5°	176.7	170.2	200.0	220.2	257.9	333.2	411.8	1311.4	2661.7	2720.1	2529.8
80°	50.0	50.7	132.5	148.1	169.5	165.0	191.0	500.1	1052.8	1186.6	1475.0
82.5°	29.9	34.4	75.3	88.3	66.2	42.9	72.7	278.0	544.9	610.5	732.0
85°	15.6	16.9	26.6	33.1	25.3	21.4	22.1	116.9	265.0	269.5	292.3
87.5°	7.1	7.1	9.7	10.4	6.5	3.9	2.6	1.9	1.9	1.3	1.3
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°	1308.1	1308.1	1308.1	1308.1	1308.1	1308.1	1308.1	1308.1	1308.1	1308.1	1308.1
2.5°	1289.3	1295.8	1284.7	1276.3	1269.8	1265.9	1261.3	1250.3	1253.5	1258.1	1257.4
5°	1295.8	1299.0	1279.5	1252.9	1228.2	1210.7	1199.0	1181.5	1181.5	1188.6	1188.6
7.5°	1301.6	1297.1	1257.4	1212.6	1184.7	1170.4	1151.6	1132.7	1129.5	1134.7	1135.3
10°	1304.9	1285.4	1230.2	1188.6	1152.2	1123.0	1099.0	1077.5	1076.9	1084.0	1085.3
12.5°	1319.1	1281.5	1228.2	1171.1	1116.5	1085.3	1056.7	1032.7	1024.3	1024.9	1026.2
15°	1341.2	1297.1	1225.6	1147.0	1087.9	1046.4	1004.8	974.3	966.5	976.9	980.8
17.5°	1367.9	1322.4	1213.3	1124.9	1052.8	1002.8	961.3	934.0	909.3	898.3	896.3
20°	1402.9	1343.8	1219.8	1092.5	1019.1	952.2	900.2	867.1	846.3	845.0	843.7
22.5°	1449.0	1367.9	1221.1	1071.0	965.8	896.3	832.0	813.2	776.2	762.5	768.4
25°	1510.1	1404.2	1217.8	1048.3	924.9	831.4	754.1	719.7	706.0	690.4	691.7
27.5°	1588.7	1462.0	1226.3	1018.4	858.0	752.1	665.7	628.7	607.9	594.9	596.9
30°	1748.5	1549.7	1225.6	989.8	796.3	670.3	572.9	548.2	527.4	515.7	521.6
32.5°	1975.8	1740.0	1252.9	951.5	726.1	560.5	494.9	467.0	449.5	436.5	439.7
35°	2257.0	1947.2	1323.0	899.6	646.3	476.7	431.9	397.5	376.1	370.9	368.9
37.5°	2518.1	2130.4	1389.3	865.1	554.7	430.6	374.1	339.7	320.9	327.4	327.4
40°	2751.3	2373.3	1464.0	809.9	471.5	378.0	309.8	294.2	284.5	295.5	299.4
42.5°	2927.3	2606.5	1565.3	737.2	404.0	315.7	265.0	276.0	279.9	287.7	285.8
45°	3145.6	2739.6	1665.3	669.6	344.9	263.0	255.9	278.6	287.7	294.9	291.6
47.5°	3346.3	2842.9	1645.2	544.9	290.3	254.6	260.5	278.6	294.2	305.9	304.0
50°	3519.0	2972.1	1606.9	423.5	278.6	262.4	265.0	271.5	294.9	302.7	302.7
52.5°	3626.8	3100.1	1559.5	342.3	287.1	272.1	267.6	266.9	282.5	288.4	283.2
55°	3756.7	3232.6	1436.7	317.6	290.3	278.6	274.7	268.9	273.4	268.9	271.5
57.5°	3900.9	3363.1	1248.3	310.5	288.4	276.7	297.5	266.3	263.7	247.5	243.6
60°	4027.6	3414.5	1083.4	294.2	278.0	271.5	276.7	263.0	250.1	228.6	220.2
62.5°	4075.0	3409.9	915.8	277.3	262.4	263.7	263.0	253.3	241.6	220.2	215.0
65°	4017.8	3306.0	742.4	257.2	250.1	255.3	248.8	234.5	215.0	197.4	192.9
67.5°	3824.3	3041.0	551.4	230.6	229.9	239.7	235.1	215.6	194.2	180.6	180.6
70°	3454.1	2714.9	357.2	191.6	205.9	222.8	222.8	202.0	174.1	162.4	165.6
72.5°	3048.8	2336.3	231.2	142.2	162.4	202.0	200.7	186.4	160.4	145.5	146.1
75°	2640.9	1853.7	149.4	98.1	105.2	172.1	178.0	152.0	124.7	106.5	103.3
77.5°	2007.6	1394.5	94.8	57.2	66.9	105.2	135.1	126.7	127.3	155.2	153.9
80°	1234.7	840.5	68.8	27.9	33.1	68.8	109.1	120.8	169.5	111.7	102.6
82.5°	618.3	393.0	36.4	16.9	18.8	30.5	65.0	144.8	123.4	74.0	70.1
85°	231.2	105.9	11.0	8.4	10.4	15.6	26.6	132.5	78.6	59.1	57.8
87.5°	1.3	1.9	1.9	2.6	3.9	4.5	9.7	63.0	39.6	28.6	27.3
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)