

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: P233728

Luminaire Tested: **VRDN-C016-D-UNV-T3-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233728
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1710-389-33)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: VRDN-C016-D-UNV-T3-7030-HSS
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 950mA LED AND TYPE III OPTIC WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4369 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 39
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

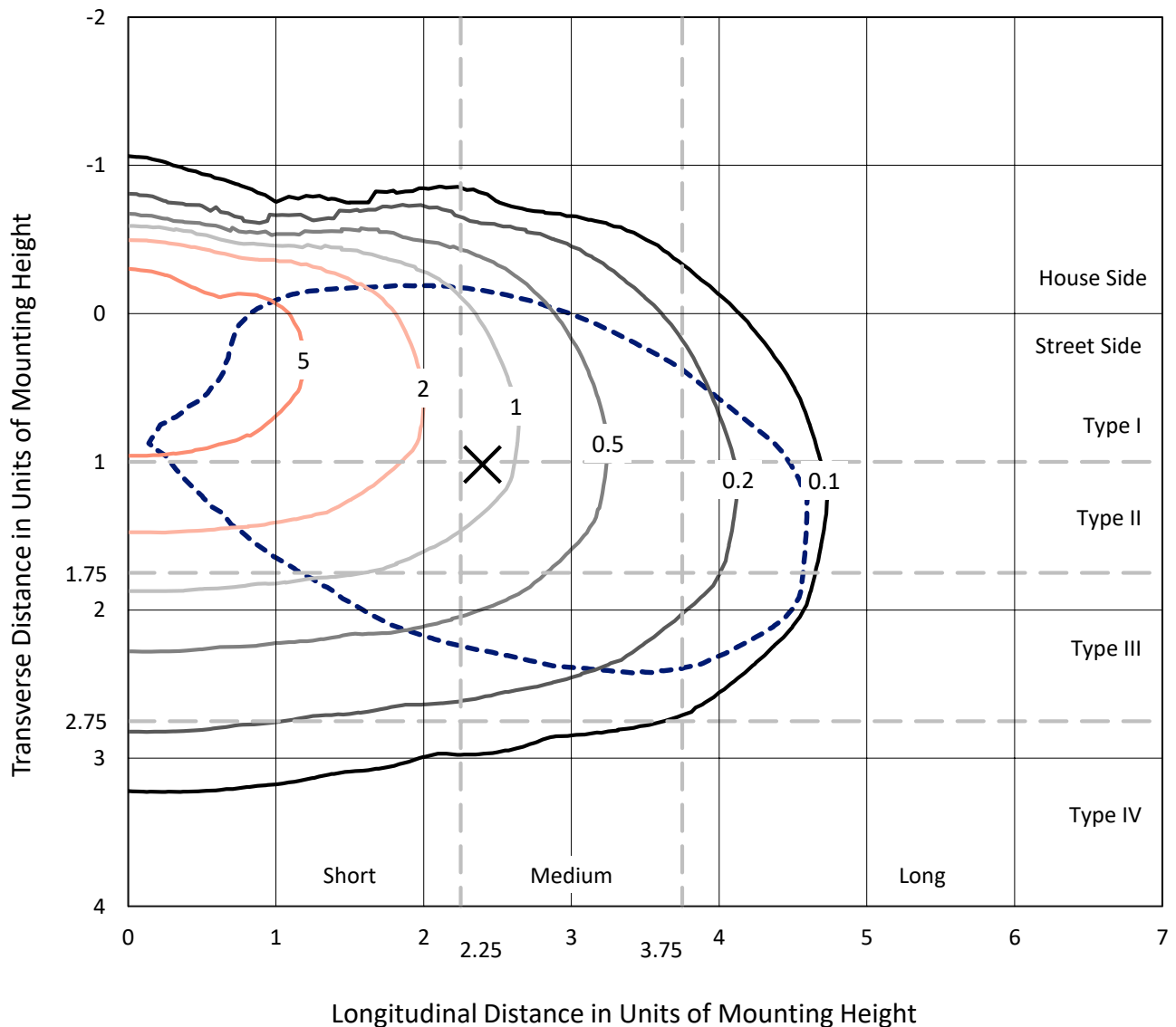


REPORT NUMBER: P233728

CATALOG NUMBER: VRDN-C016-D-UNV-T3-7030-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

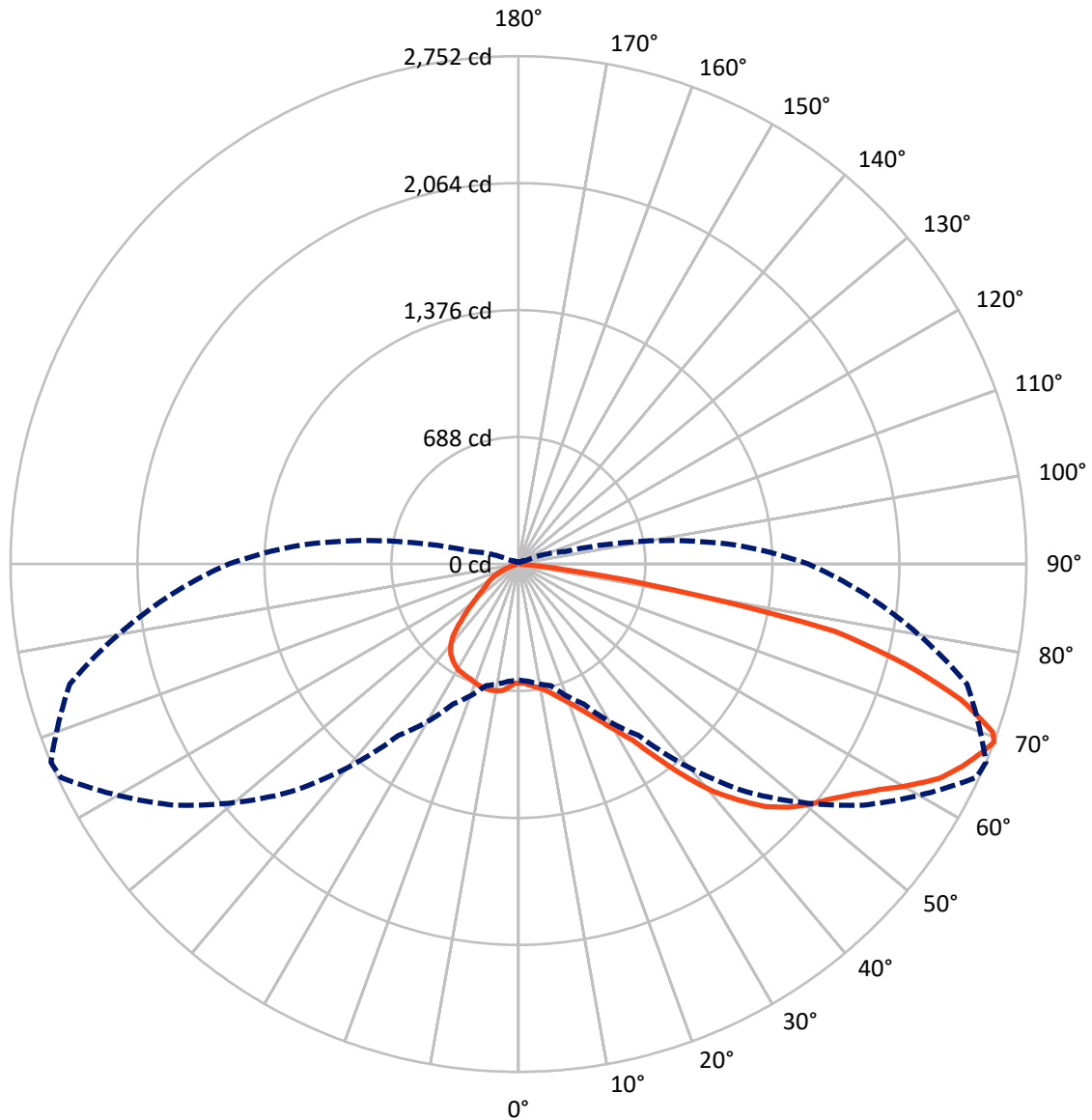


Based on 10 foot mounting height. Maximum calculated value = 7.9 fc
 Type III - Medium - Semi-Cutoff

REPORT NUMBER: P233728

CATALOG NUMBER: VRDN-C016-D-UNV-T3-7030-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P233728

CATALOG NUMBER: VRDN-C016-D-UNV-T3-7030-HSS

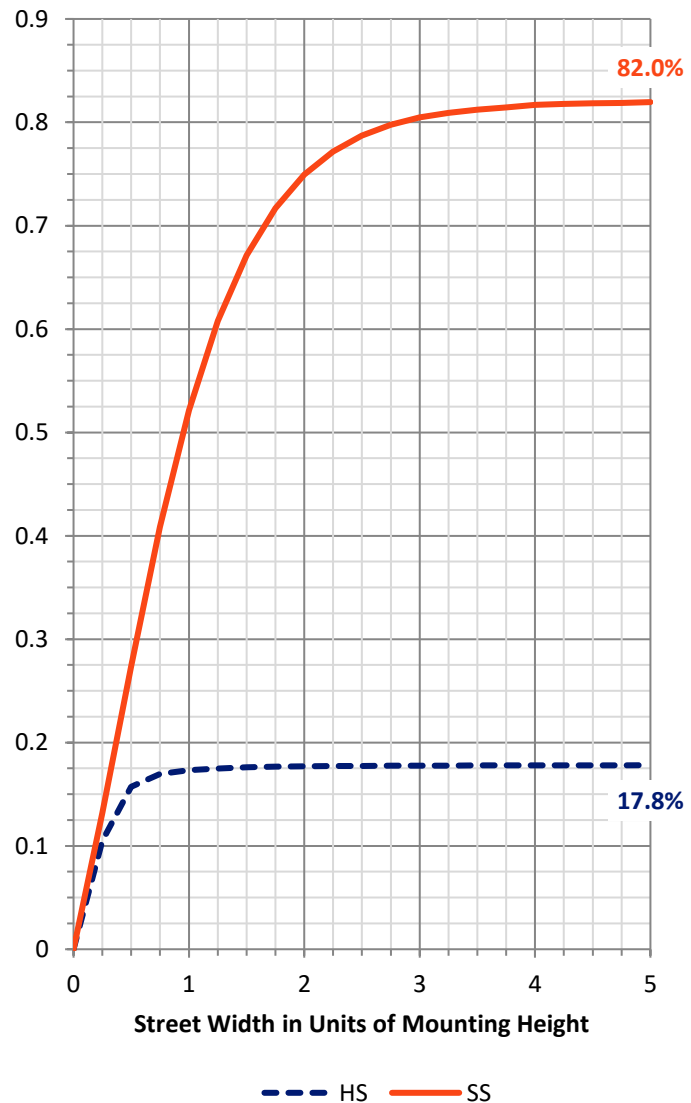
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	787.6	0.0	787.6
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	3581.4	0.0	3581.4
	% Fixture	82.0	0.0	82.0
Total	Lumens	4369.0	0.0	4369.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.2	1.5
10°-20°	205.1	4.7
20°-30°	350.1	8.0
30°-40°	529.3	12.1
40°-50°	747.8	17.1
50°-60°	903.7	20.7
60°-70°	953.6	21.8
70°-80°	574.1	13.1
80°-90°	40.1	0.9
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°	4369.0	100.0
0°-180°	4369.0	100.0



REPORT NUMBER: P233728

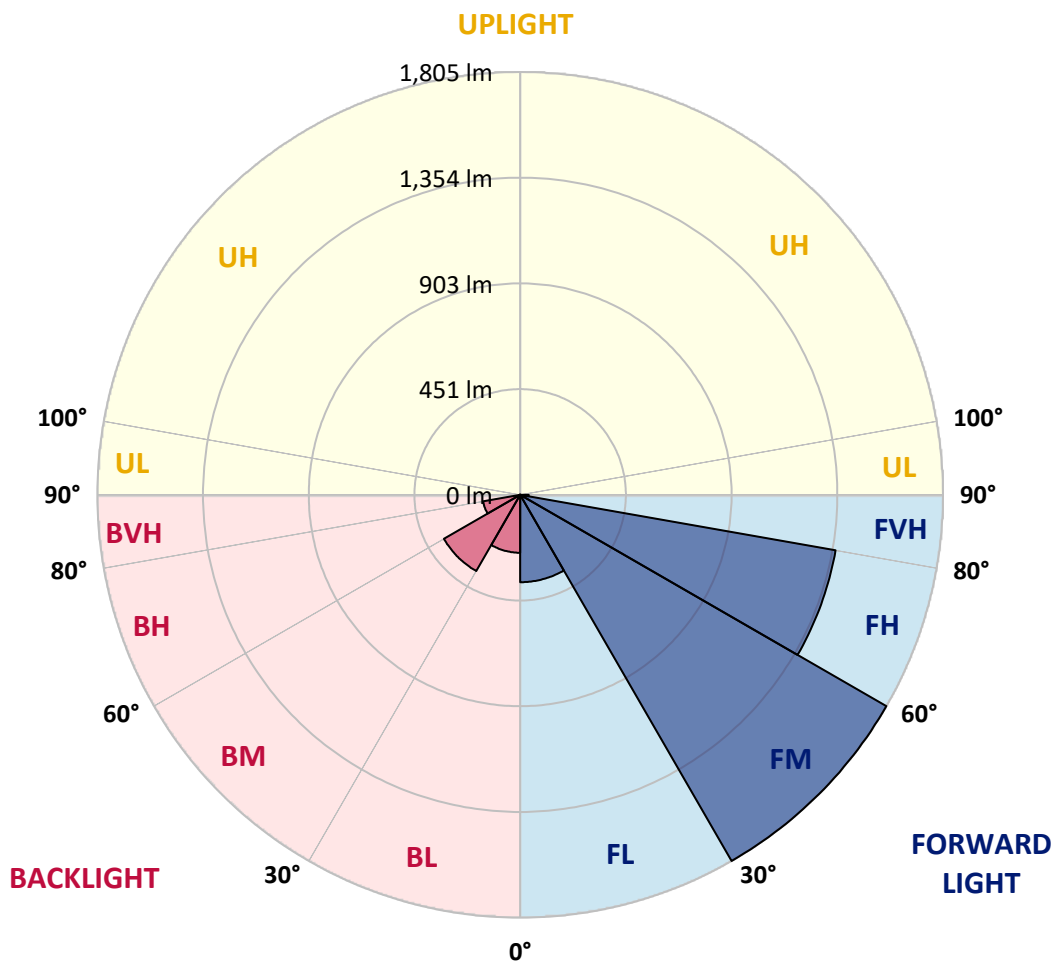
CATALOG NUMBER: VRDN-C016-D-UNV-T3-7030-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	373.1	8.5			
FM	(30°-60°)	1805.0	41.3			
FH	(60°-80°)	1367.1	31.3			G1/1800
FVH	(80°-90°)	36.2	0.8			G1/100
BL	(0°-30°)	247.3	5.7	B1/500		
BM	(30°-60°)	375.8	8.6	B1/1000		
BH	(60°-80°)	160.6	3.7	B1/500		G1/500
BVH	(80°-90°)	3.9	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Medium





REPORT NUMBER: P233728

CATALOG NUMBER: VRDN-C016-D-UNV-T3-7030-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	646.1	646.1	646.1	646.1	646.1	646.1	646.1	646.1	646.1	646.1	646.1
2.5°	662.8	661.8	661.8	655.9	650.3	648.9	648.5	646.8	647.2	644.7	642.3
5°	682.0	682.0	681.3	673.6	667.7	663.9	661.4	658.3	658.6	656.9	654.8
7.5°	710.9	711.2	709.8	699.7	693.8	684.4	678.8	672.9	672.6	670.5	671.2
10°	746.4	747.4	745.3	732.4	722.3	709.5	697.6	687.2	686.5	684.1	686.1
12.5°	786.4	787.8	782.6	769.3	757.9	737.7	723.4	709.5	707.4	707.0	708.4
15°	832.4	833.0	831.3	811.8	797.9	779.4	756.1	738.4	736.3	736.6	734.9
17.5°	883.5	885.3	881.4	864.0	845.6	820.2	792.3	770.4	769.3	768.3	760.6
20°	937.8	939.6	937.1	920.8	898.8	866.8	832.7	807.6	807.3	804.9	787.1
22.5°	999.1	1001.5	1000.1	980.3	957.0	922.2	879.7	853.6	852.9	845.2	818.4
25°	1065.6	1064.9	1066.3	1045.1	1023.1	986.6	934.0	906.9	906.9	897.5	857.8
27.5°	1130.0	1129.6	1132.1	1117.1	1094.1	1059.7	996.3	968.8	971.3	957.7	905.1
30°	1192.7	1192.7	1198.6	1188.8	1171.8	1135.6	1073.6	1044.7	1047.8	1033.6	965.0
32.5°	1251.1	1253.9	1264.0	1258.1	1245.2	1212.5	1159.6	1133.1	1140.4	1146.4	1076.4
35°	1294.3	1297.1	1320.4	1322.5	1319.4	1297.4	1258.1	1275.2	1283.9	1330.5	1252.5
37.5°	1332.3	1335.7	1363.6	1381.0	1391.1	1377.5	1379.9	1437.0	1453.4	1508.4	1402.9
40°	1360.1	1367.8	1395.3	1419.3	1454.8	1470.8	1510.5	1591.6	1618.1	1640.0	1506.3
42.5°	1341.0	1346.2	1394.6	1459.0	1510.8	1567.2	1631.6	1728.1	1747.9	1740.9	1597.5
45°	1312.8	1319.0	1369.8	1469.4	1555.4	1667.8	1746.5	1850.9	1873.6	1834.9	1676.2
47.5°	1281.1	1289.8	1344.8	1455.5	1592.6	1760.4	1850.6	1956.4	1969.7	1918.8	1742.3
50°	1249.1	1258.8	1321.1	1444.0	1621.5	1837.7	1926.5	2042.4	2046.2	1988.5	1801.9
52.5°	1205.9	1216.0	1284.2	1420.0	1641.7	1888.5	1993.0	2113.1	2115.5	2063.7	1858.3
55°	1151.2	1164.1	1236.2	1384.5	1646.6	1918.1	2035.1	2186.5	2202.9	2145.1	1904.6
57.5°	1086.8	1098.7	1178.0	1333.3	1622.2	1928.2	2093.9	2283.7	2306.3	2227.6	1942.9
60°	1012.7	1026.3	1106.0	1267.2	1573.2	1956.4	2191.4	2420.8	2434.4	2313.9	1976.6
62.5°	936.8	946.5	1018.9	1174.2	1496.6	1973.5	2277.7	2549.6	2558.7	2397.1	1996.8
65°	828.9	841.1	911.7	1067.7	1386.2	1940.8	2310.8	2637.7	2643.3	2466.8	1987.1
67.5°	711.6	721.3	772.8	939.2	1241.4	1837.0	2297.2	2696.5	2714.3	2521.1	1942.9
69°	628.4	638.1	682.7	836.5	1133.8	1745.1	2278.1	2736.6	2752.2	2517.2	1886.5
70°	563.6	573.4	615.5	759.9	1049.6	1667.5	2247.8	2716.4	2726.5	2474.4	1831.5
72.5°	403.1	412.9	447.3	534.4	795.1	1370.5	2060.2	2492.2	2505.8	2268.7	1636.9
75°	211.0	234.3	296.2	345.3	471.0	965.0	1712.7	2143.4	2163.2	1990.9	1346.2
77.5°	27.2	28.5	83.5	140.3	194.6	407.0	1216.7	1721.1	1752.4	1593.3	930.9
80°	21.9	22.3	28.9	70.0	96.8	165.0	431.7	805.5	843.5	708.1	342.2
82.5°	15.3	16.0	22.6	36.9	31.7	60.2	150.0	227.7	234.6	203.0	136.5
85°	8.7	8.7	10.8	14.3	10.1	22.6	31.0	33.1	29.6	29.2	21.9
87.5°	2.4	2.8	3.1	2.4	1.0	1.0	1.4	1.4	1.4	1.0	1.0
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: P233728

CATALOG NUMBER: VRDN-C016-D-UNV-T3-7030-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	646.1	646.1	646.1	646.1	646.1	646.1	646.1	646.1	646.1	646.1	646.1
2.5°	646.1	645.4	645.8	647.2	649.2	656.9	662.1	662.8	665.3	674.3	673.3
5°	657.2	661.4	663.9	671.2	676.0	686.5	692.8	693.5	696.9	706.3	706.7
7.5°	672.9	679.9	683.4	691.7	693.5	698.3	700.1	698.3	698.7	707.0	707.7
10°	686.5	695.2	695.2	697.3	694.1	694.5	688.9	683.7	680.9	688.2	690.0
12.5°	707.4	709.8	704.2	698.0	688.6	680.2	670.8	662.5	655.9	660.0	657.6
15°	729.0	725.1	711.6	695.2	678.5	664.2	644.7	632.5	621.0	623.5	621.4
17.5°	750.5	738.0	716.8	689.6	665.3	638.1	610.9	591.8	570.9	569.2	566.0
20°	771.4	753.3	718.2	678.1	644.0	605.7	563.6	530.9	499.9	491.9	486.7
22.5°	796.5	770.4	719.9	667.0	621.0	568.8	505.1	454.3	420.9	409.7	404.5
25°	828.5	794.1	724.8	658.6	597.7	523.2	435.8	377.7	341.5	322.4	320.6
27.5°	866.5	822.6	733.1	647.8	564.6	462.3	364.1	303.6	264.9	245.4	239.2
30°	916.2	858.1	740.8	639.5	518.0	395.8	288.9	221.4	175.5	162.9	156.3
32.5°	1010.6	915.9	750.5	620.0	463.0	323.1	204.7	136.5	105.1	96.8	96.8
35°	1164.1	1043.0	774.9	593.2	396.9	235.3	122.9	76.6	62.7	57.8	55.4
37.5°	1302.7	1171.1	835.8	551.8	316.4	139.2	70.3	47.3	42.8	43.5	43.5
40°	1400.5	1258.8	903.0	495.7	214.8	74.5	44.6	37.9	38.6	39.0	39.0
42.5°	1484.4	1333.6	939.9	429.2	117.0	48.4	38.3	34.5	35.5	35.2	34.8
45°	1554.7	1394.6	952.1	337.7	56.7	42.8	34.8	31.7	31.7	31.3	31.3
47.5°	1614.9	1448.5	929.5	251.0	46.0	39.3	33.1	29.2	28.9	30.6	30.6
50°	1669.9	1490.3	873.1	190.1	44.6	36.2	31.3	27.2	27.5	29.9	29.9
52.5°	1715.9	1515.0	789.5	142.4	41.4	33.4	28.9	25.4	25.4	27.8	27.8
55°	1750.0	1515.0	725.8	106.5	39.7	30.6	26.8	24.4	23.0	23.7	24.0
57.5°	1767.1	1486.5	674.7	86.3	37.6	27.8	24.7	21.2	18.8	19.5	19.1
60°	1762.5	1470.1	615.8	76.9	35.2	25.8	21.9	18.1	15.7	15.0	15.0
62.5°	1754.2	1451.7	542.4	66.8	32.7	24.0	18.1	14.6	13.2	12.5	12.9
65°	1722.5	1391.8	449.4	55.7	30.3	23.3	15.3	12.9	11.5	10.8	10.8
67.5°	1645.9	1283.9	339.8	47.0	28.2	18.8	13.2	11.1	9.7	9.1	9.1
69°	1570.0	1180.8	260.7	42.8	26.8	17.1	12.2	10.1	9.1	8.0	8.0
70°	1504.6	1101.1	204.3	40.0	25.8	16.4	11.8	9.7	8.7	7.7	7.7
72.5°	1281.1	873.4	103.7	34.8	21.6	14.3	10.4	8.7	7.3	6.3	6.3
75°	993.9	601.9	68.6	27.5	16.7	12.9	9.4	7.7	6.3	5.2	4.9
77.5°	598.1	235.3	49.1	17.8	10.8	10.1	7.7	6.3	5.2	4.2	4.2
80°	165.0	101.0	33.1	11.8	6.3	6.6	5.6	4.5	3.8	3.1	3.1
82.5°	99.2	65.4	21.9	7.7	4.2	4.2	3.1	3.1	2.4	2.4	2.4
85°	17.1	13.2	5.2	3.1	2.4	2.4	1.7	1.0	1.0	1.0	1.0
87.5°	1.0	1.0	1.0	1.4	1.4	1.0	0.7	0.3	0.0	0.0	0.0
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)