

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: P233677

Luminaire Tested: **VRDN-C018-D-UNV-T2-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233677
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1710-389-32)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: VRDN-C018-D-UNV-T2-7030-HSS
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1210mA LED AND TYPE II OPTIC WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5270 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 50
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

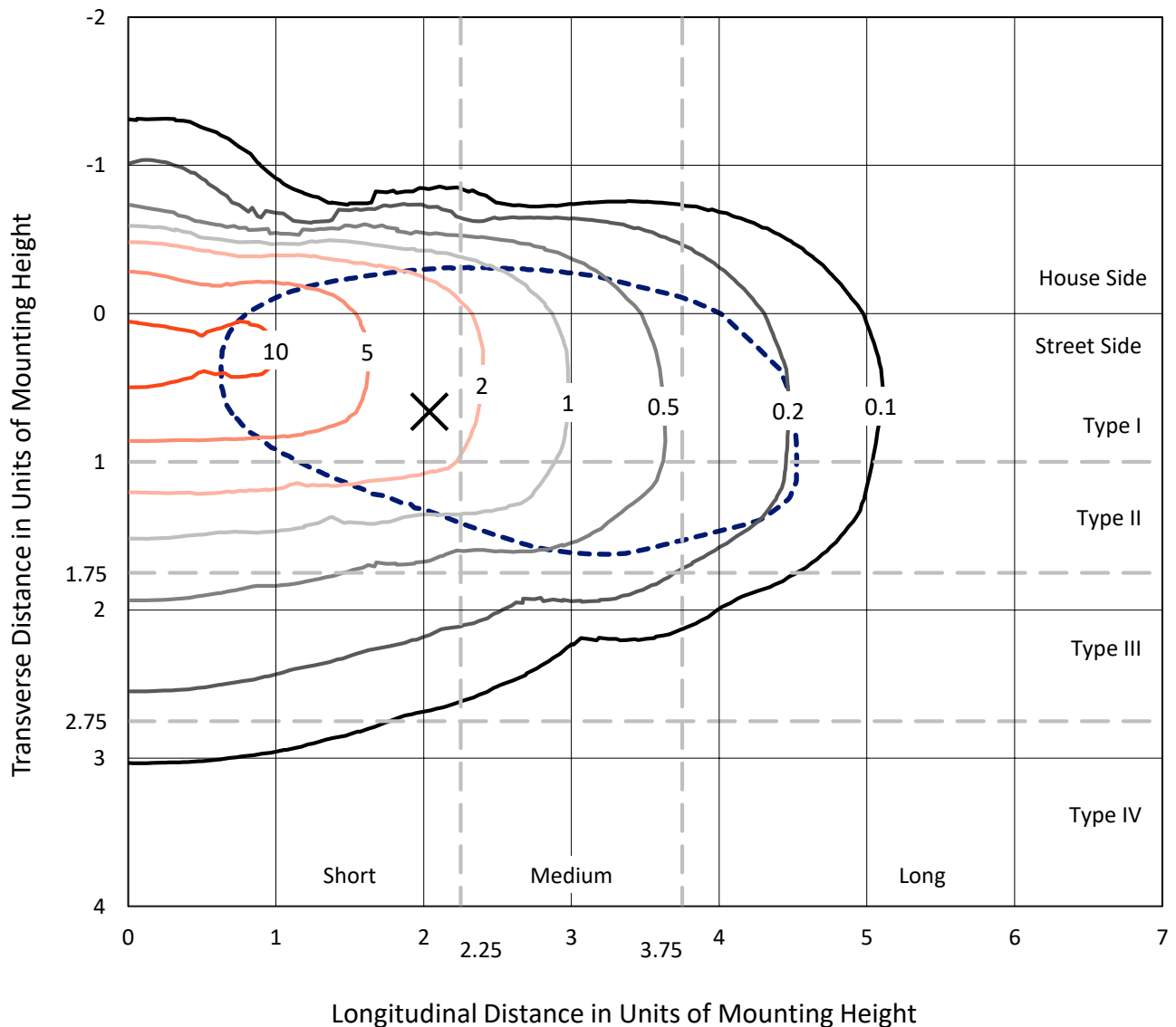


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

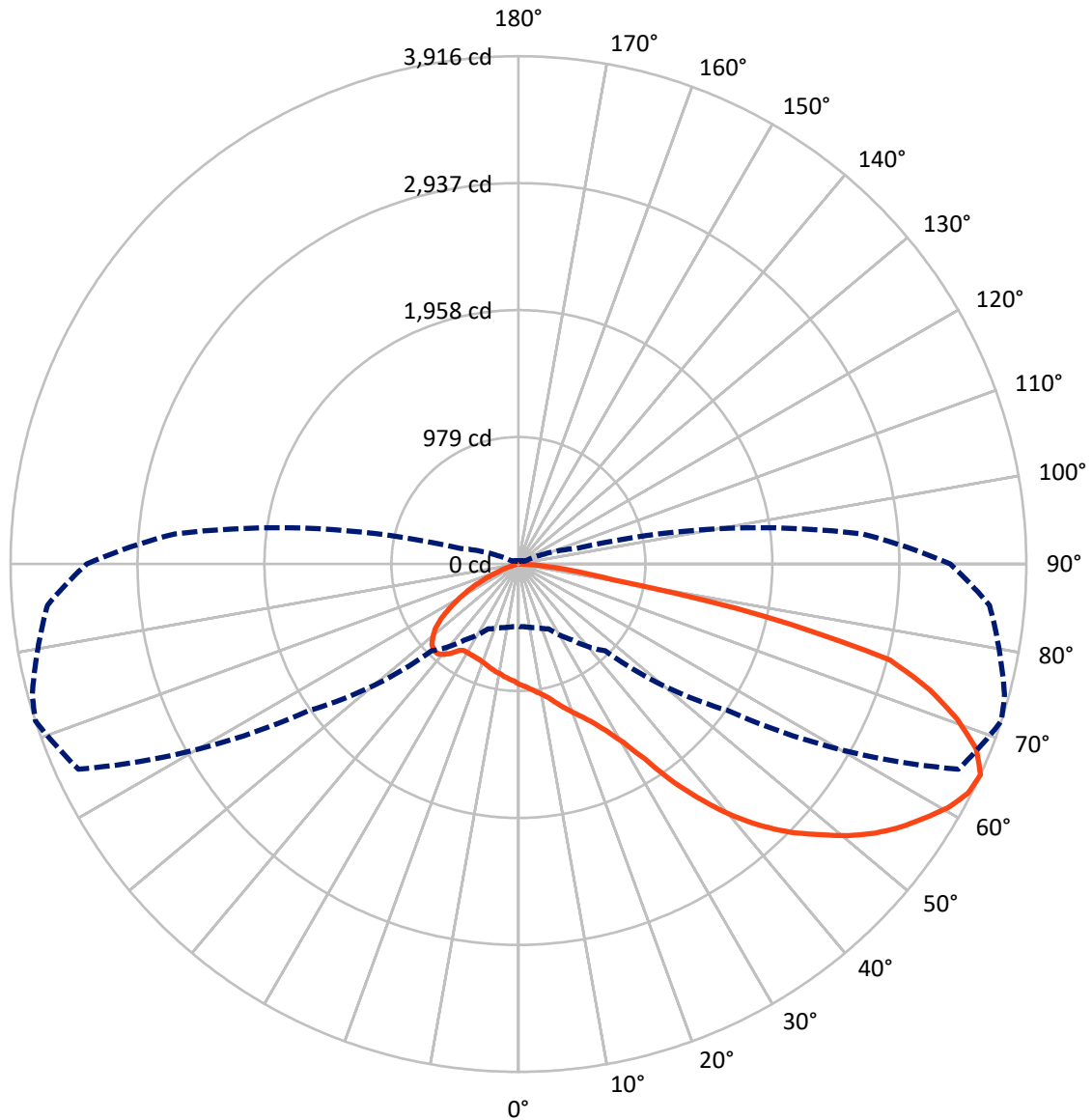


Based on 10 foot mounting height. Maximum calculated value = 11.6 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 72-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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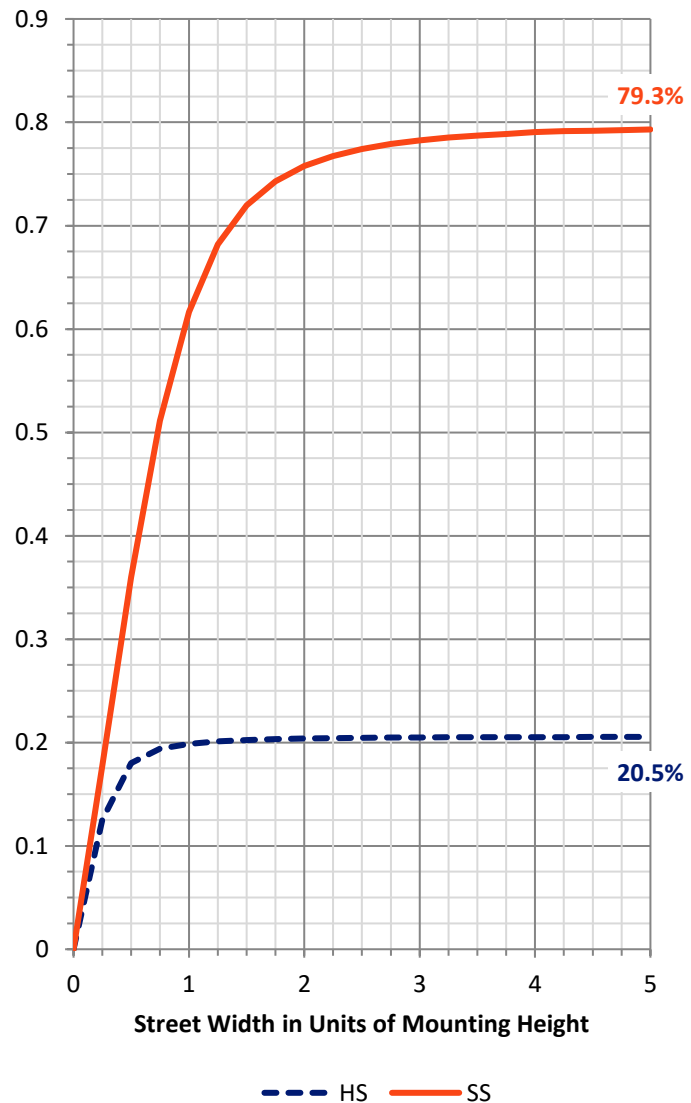
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1095.1	0.0	1095.1
	% Fixture	20.8	0.0	20.8
Street Side	Lumens	4174.9	0.0	4174.9
	% Fixture	79.2	0.0	79.2
Total	Lumens	5270.0	0.0	5270.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.0	1.7
10°-20°	270.2	5.1
20°-30°	451.5	8.6
30°-40°	667.9	12.7
40°-50°	923.4	17.5
50°-60°	1080.5	20.5
60°-70°	1074.0	20.4
70°-80°	643.3	12.2
80°-90°	70.0	1.3
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°	5270.0	100.0
0°-180°	5270.0	100.0



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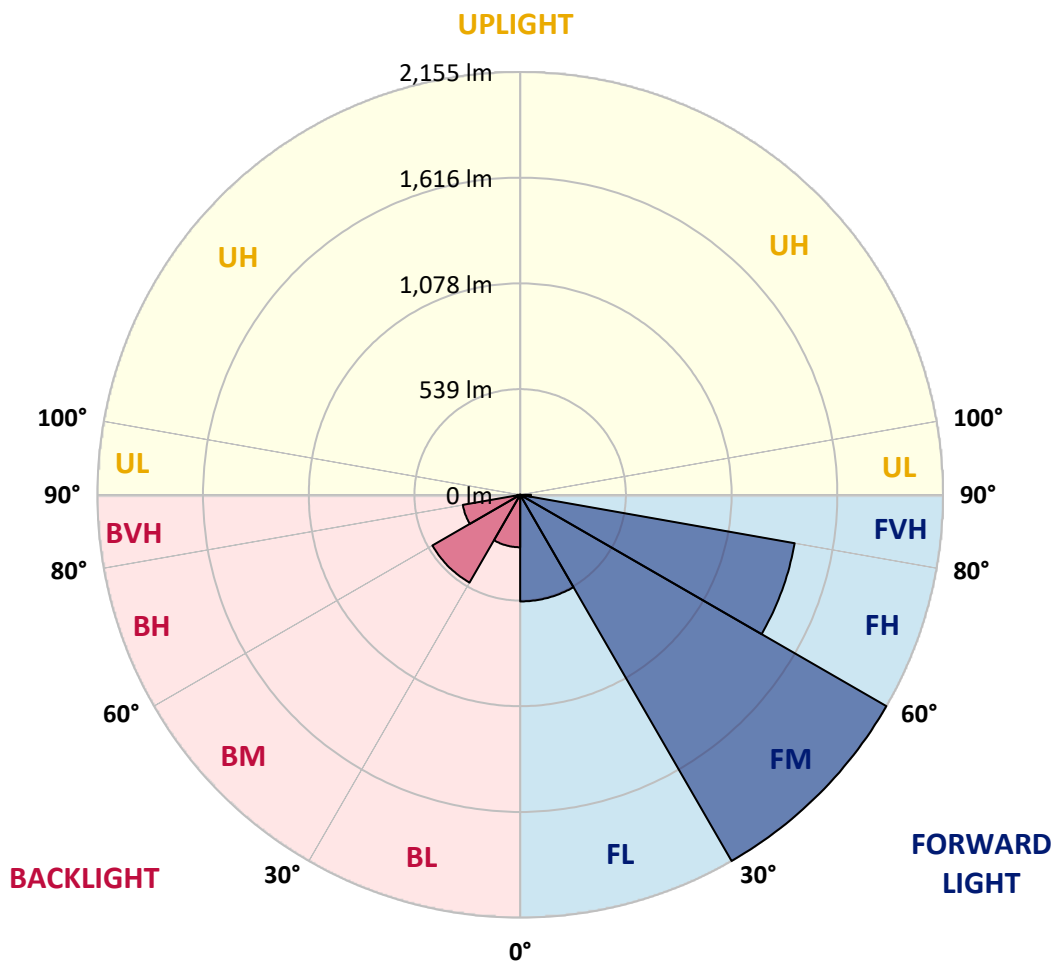
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	543.4	10.3			
FM	(30°-60°)	2155.3	40.9			
FH	(60°-80°)	1420.8	27.0			G1/1800
FVH	(80°-90°)	55.3	1.1			G1/100
BL	(0°-30°)	267.3	5.1	B1/500		
BM	(30°-60°)	516.6	9.8	B1/1000		
BH	(60°-80°)	296.5	5.6	B1/500		G1/500
BVH	(80°-90°)	14.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	72°	75°	85°
0°	928.8	928.8	928.8	928.8	928.8	928.8	928.8	928.8	928.8	928.8	928.8
2.5°	1007.0	1007.9	1008.3	992.4	983.8	973.9	964.5	954.2	943.4	939.5	925.3
5°	1069.0	1069.8	1067.2	1052.6	1036.7	1022.1	1004.0	985.5	967.5	962.3	938.2
7.5°	1128.7	1128.3	1126.2	1107.7	1087.9	1068.5	1043.2	1018.2	994.6	986.4	950.7
10°	1178.2	1179.0	1180.3	1160.6	1141.2	1118.0	1087.0	1050.0	1023.0	1010.1	963.6
12.5°	1232.4	1229.8	1233.2	1213.9	1187.2	1166.1	1138.2	1094.8	1062.5	1046.2	988.6
15°	1294.3	1294.3	1289.6	1273.6	1246.6	1220.8	1192.8	1152.8	1114.1	1089.2	1022.1
17.5°	1336.9	1334.3	1333.0	1319.2	1296.0	1273.6	1252.1	1211.3	1169.2	1138.6	1053.5
20°	1354.9	1355.8	1361.8	1351.9	1339.4	1326.1	1302.5	1270.6	1224.2	1191.5	1087.0
22.5°	1389.7	1390.6	1397.9	1391.0	1387.6	1384.2	1362.2	1334.3	1284.8	1253.4	1129.2
25°	1391.9	1392.8	1412.5	1423.7	1441.3	1449.5	1434.5	1410.4	1360.1	1329.5	1191.9
27.5°	1398.3	1400.9	1421.1	1452.1	1498.5	1514.9	1506.3	1505.4	1462.8	1430.6	1273.6
30°	1392.8	1395.3	1424.6	1467.6	1532.1	1580.2	1590.1	1615.5	1598.3	1574.2	1387.2
32.5°	1353.2	1362.7	1397.5	1465.9	1560.9	1648.2	1680.0	1766.8	1792.6	1795.2	1615.1
35°	1281.4	1286.5	1349.8	1446.1	1580.2	1712.2	1800.0	1960.3	2069.6	2064.8	1867.5
37.5°	1226.8	1228.5	1293.4	1412.5	1591.0	1781.0	1936.7	2193.4	2319.0	2324.5	2095.4
40°	1156.7	1169.2	1231.5	1372.1	1585.0	1839.1	2072.6	2410.5	2556.7	2550.7	2295.3
42.5°	1091.3	1098.6	1160.6	1308.9	1563.0	1883.4	2205.9	2620.8	2764.4	2744.7	2487.1
45°	1023.4	1035.9	1092.6	1227.2	1519.6	1908.3	2326.7	2820.3	2951.9	2927.4	2656.1
47.5°	955.4	964.5	1024.7	1152.4	1437.9	1907.5	2445.4	3007.4	3118.3	3101.1	2816.0
50°	727.1	746.9	905.1	1074.1	1323.1	1871.3	2541.3	3185.0	3292.9	3266.2	2972.1
52.5°	666.5	672.9	717.2	983.4	1200.5	1785.3	2616.1	3351.8	3446.8	3416.3	3119.2
55°	629.9	637.7	655.7	799.4	1099.9	1643.9	2647.0	3507.5	3578.4	3547.5	3250.3
57.5°	581.4	589.1	624.8	688.4	995.0	1428.4	2601.5	3645.5	3694.9	3661.0	3372.0
60°	547.8	551.3	585.7	635.5	880.2	1210.9	2449.2	3757.7	3809.3	3768.9	3492.4
62.5°	516.9	520.7	545.2	594.7	785.2	1051.3	2212.3	3785.2	3890.6	3859.2	3602.5
65°	481.2	484.6	507.0	550.8	711.6	947.3	1968.1	3743.1	3915.5	3879.8	3645.1
67.5°	433.9	438.6	456.2	495.8	615.3	829.5	1604.7	3665.3	3806.3	3769.3	3557.8
70°	375.4	377.5	398.6	434.3	519.9	719.8	1258.6	3388.4	3590.0	3549.2	3311.8
72.5°	303.1	307.0	329.8	367.2	427.0	593.0	899.1	2927.8	3316.1	3300.6	2953.6
75°	202.5	217.6	271.8	309.6	353.0	463.1	603.7	2054.9	2960.5	2972.6	2523.2
77.5°	38.7	40.0	113.9	169.4	206.4	282.9	373.7	1009.6	1951.3	2162.4	1902.7
80°	25.4	27.5	48.6	118.7	136.7	140.2	191.8	442.5	735.3	930.1	1097.3
82.5°	13.3	15.9	29.2	68.8	62.8	34.8	62.8	228.3	407.6	468.3	553.4
85°	5.6	6.4	14.2	23.6	17.6	14.6	14.6	91.2	180.6	209.0	217.1
87.5°	0.9	0.9	3.0	4.3	2.6	1.7	1.3	0.4	0.4	0.4	0.4
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°	928.8	928.8	928.8	928.8	928.8	928.8	928.8	928.8	928.8	928.8	928.8
2.5°	925.3	917.6	906.9	894.4	885.4	880.6	876.8	866.4	863.0	869.9	868.2
5°	929.2	920.2	895.7	875.5	855.3	842.8	829.0	811.0	803.2	807.5	806.2
7.5°	931.8	920.6	884.1	852.7	818.7	795.1	777.0	753.4	741.7	746.0	740.9
10°	935.7	918.9	870.3	828.6	784.3	749.9	723.3	695.7	683.7	687.1	682.8
12.5°	952.0	924.9	863.9	808.0	753.8	710.8	677.2	648.0	630.8	634.2	630.8
15°	978.7	937.0	854.4	781.7	721.5	672.5	633.8	600.3	580.5	585.2	580.9
17.5°	1006.6	951.6	845.8	752.5	687.1	632.5	592.1	563.7	531.9	534.9	528.5
20°	1030.7	965.3	841.1	725.0	654.9	590.0	541.4	522.0	478.2	467.0	459.7
22.5°	1064.2	985.5	837.2	702.6	614.9	547.4	489.8	453.6	406.3	382.7	380.5
25°	1112.0	1015.6	836.8	685.0	578.8	502.7	422.3	361.6	319.9	292.0	288.1
27.5°	1172.6	1055.6	841.5	667.4	542.7	446.3	339.3	272.2	234.8	213.3	209.4
30°	1259.9	1108.1	847.5	647.1	502.2	373.2	252.8	200.4	169.4	153.9	150.9
32.5°	1446.9	1242.7	856.5	626.1	453.6	281.2	183.6	145.3	121.7	112.2	117.0
35°	1672.2	1425.4	897.0	599.0	390.0	200.4	132.4	103.6	87.3	89.4	92.0
37.5°	1869.2	1600.0	987.7	564.2	304.9	147.1	91.2	77.4	77.4	84.3	90.3
40°	2054.9	1757.4	1069.0	516.9	213.7	101.5	70.5	71.8	70.5	74.8	73.5
42.5°	2230.4	1906.6	1132.6	460.5	139.7	70.1	64.1	66.6	64.5	65.4	61.5
45°	2396.4	2061.0	1167.9	377.5	92.9	61.1	58.9	63.2	62.8	61.9	58.0
47.5°	2549.9	2196.8	1185.5	272.2	64.1	55.0	55.5	58.5	59.8	58.9	56.8
50°	2700.4	2332.3	1169.6	163.0	57.6	50.3	53.3	53.3	55.9	51.2	49.4
52.5°	2844.4	2468.2	1119.3	98.9	52.9	46.9	49.4	48.6	49.9	45.1	44.3
55°	2979.9	2569.2	1019.9	77.8	49.9	44.7	45.1	46.0	43.9	38.7	40.4
57.5°	3123.0	2655.2	881.5	70.5	48.6	41.7	42.6	42.1	38.7	34.0	34.0
60°	3240.9	2717.6	742.6	64.1	47.7	40.8	37.8	37.0	31.8	29.2	28.8
62.5°	3322.1	2735.2	607.2	57.2	45.1	37.8	34.0	31.4	26.7	24.1	23.2
65°	3328.6	2659.9	462.2	51.6	42.6	35.3	31.4	25.8	21.1	18.9	18.1
67.5°	3196.6	2451.0	325.9	47.3	38.3	32.7	27.5	20.6	16.8	15.0	14.6
70°	2920.5	2191.3	199.5	41.3	34.8	30.5	28.4	16.8	13.8	11.6	11.6
72.5°	2562.8	1898.0	117.0	35.3	29.2	24.5	18.9	14.2	11.6	9.0	9.0
75°	2196.4	1506.7	71.8	26.7	21.5	19.3	14.6	12.0	9.5	6.9	6.9
77.5°	1581.5	1112.4	55.9	17.2	13.3	13.8	10.7	9.5	7.7	5.6	5.6
80°	970.5	677.2	40.0	11.6	7.7	7.7	7.7	7.3	5.6	4.7	4.3
82.5°	491.9	309.6	19.8	6.9	4.7	4.7	4.7	5.2	4.3	3.4	3.4
85°	172.9	86.9	6.0	3.4	3.0	3.0	2.6	2.6	2.1	1.7	1.7
87.5°	0.4	0.9	0.9	1.3	1.7	1.7	1.3	0.9	0.4	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)