

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: P233691

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233691  
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-C01-D-UNV-T2-HSS  
Description: VERDEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1230mA LED AND TYPE II OPTIC WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6483 lumens  
Efficiency: N/A  
Efficacy: 115.8 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

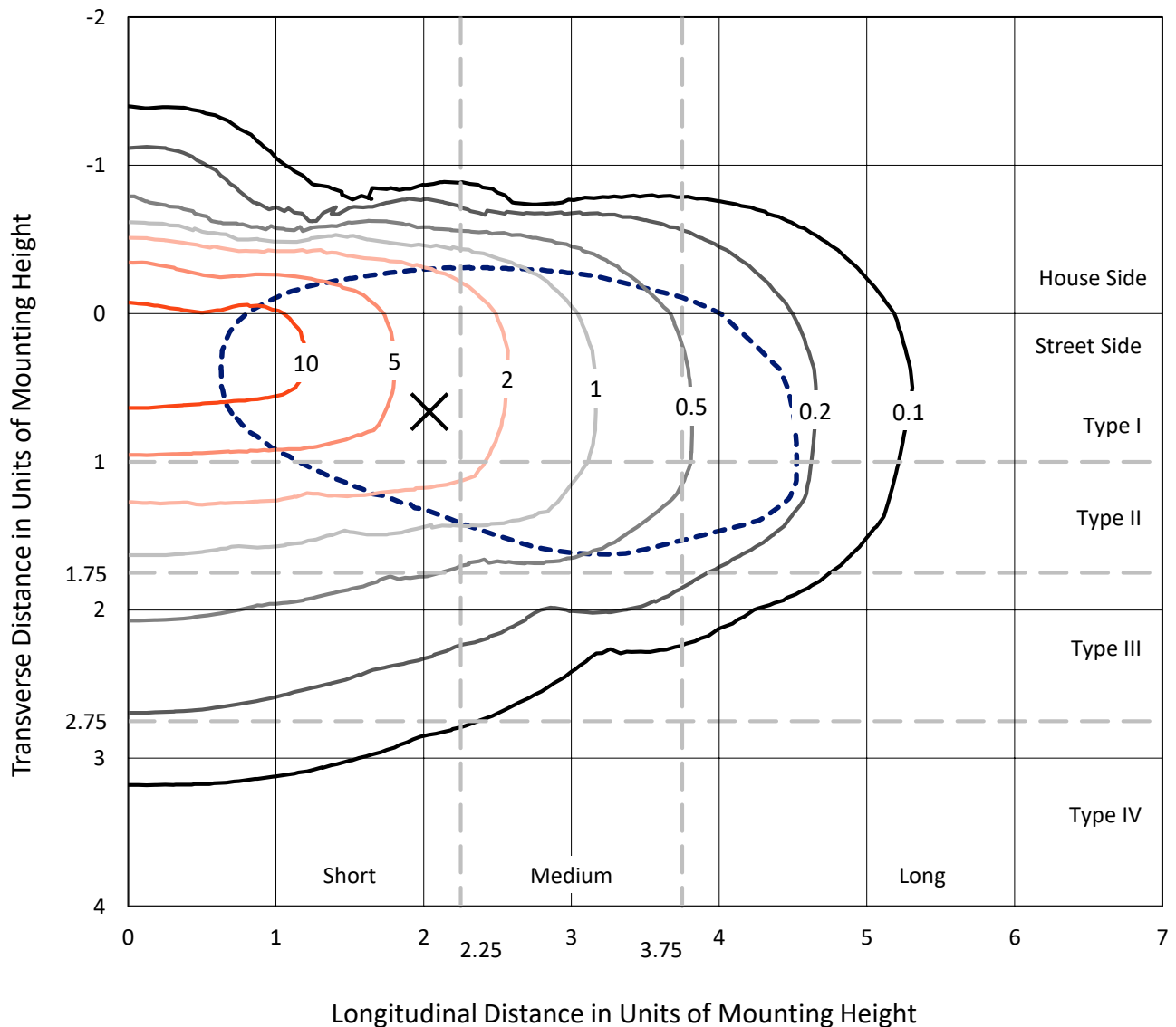
Input Watts (W): 56  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

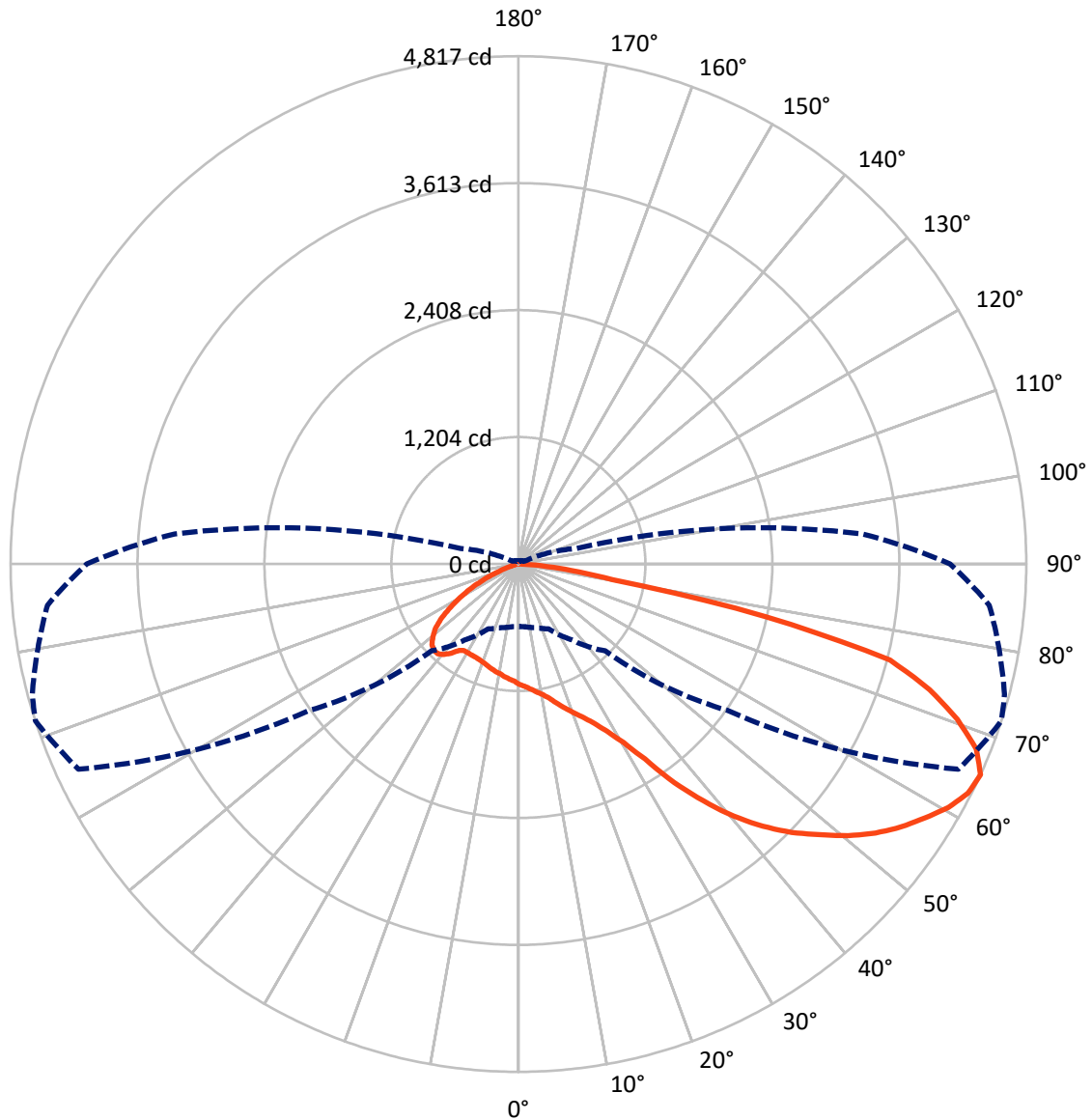
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.3 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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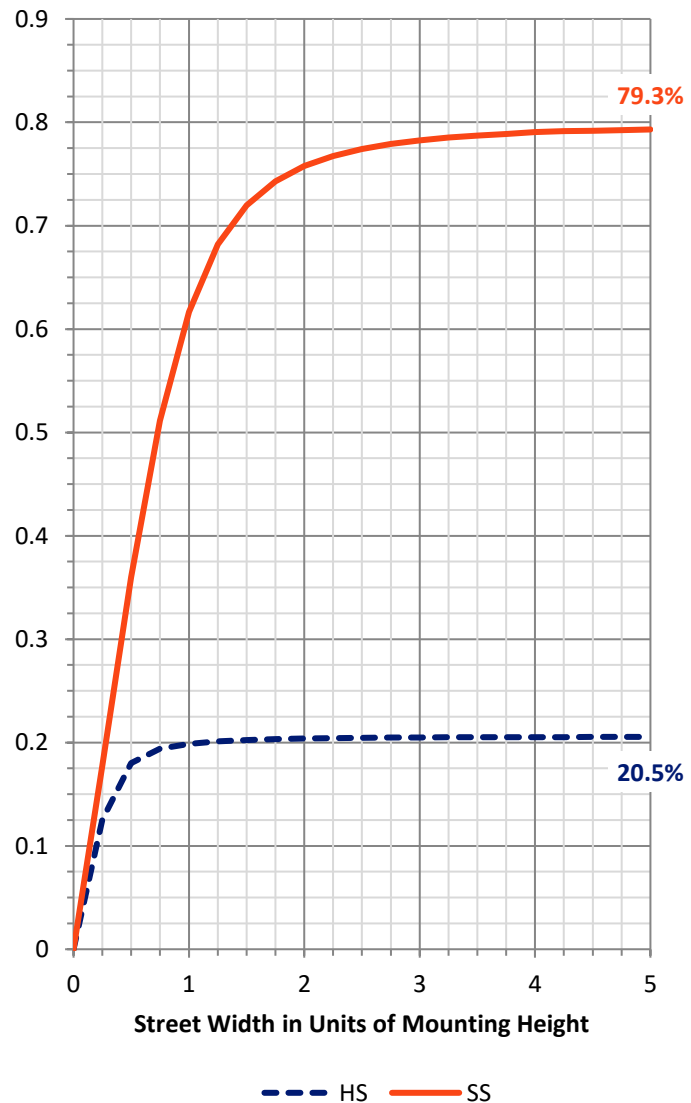
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1347.2	0.0	1347.2
	% Fixture	20.8	0.0	20.8
<b>Street Side</b>	Lumens	5135.8	0.0	5135.8
	% Fixture	79.2	0.0	79.2
<b>Total</b>	Lumens	6483.0	0.0	6483.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.5	1.7
10°-20°	332.4	5.1
20°-30°	555.5	8.6
30°-40°	821.7	12.7
40°-50°	1135.9	17.5
50°-60°	1329.3	20.5
60°-70°	1321.3	20.4
70°-80°	791.3	12.2
80°-90°	86.1	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°	6483.0	100.0
0°-180°	6483.0	100.0



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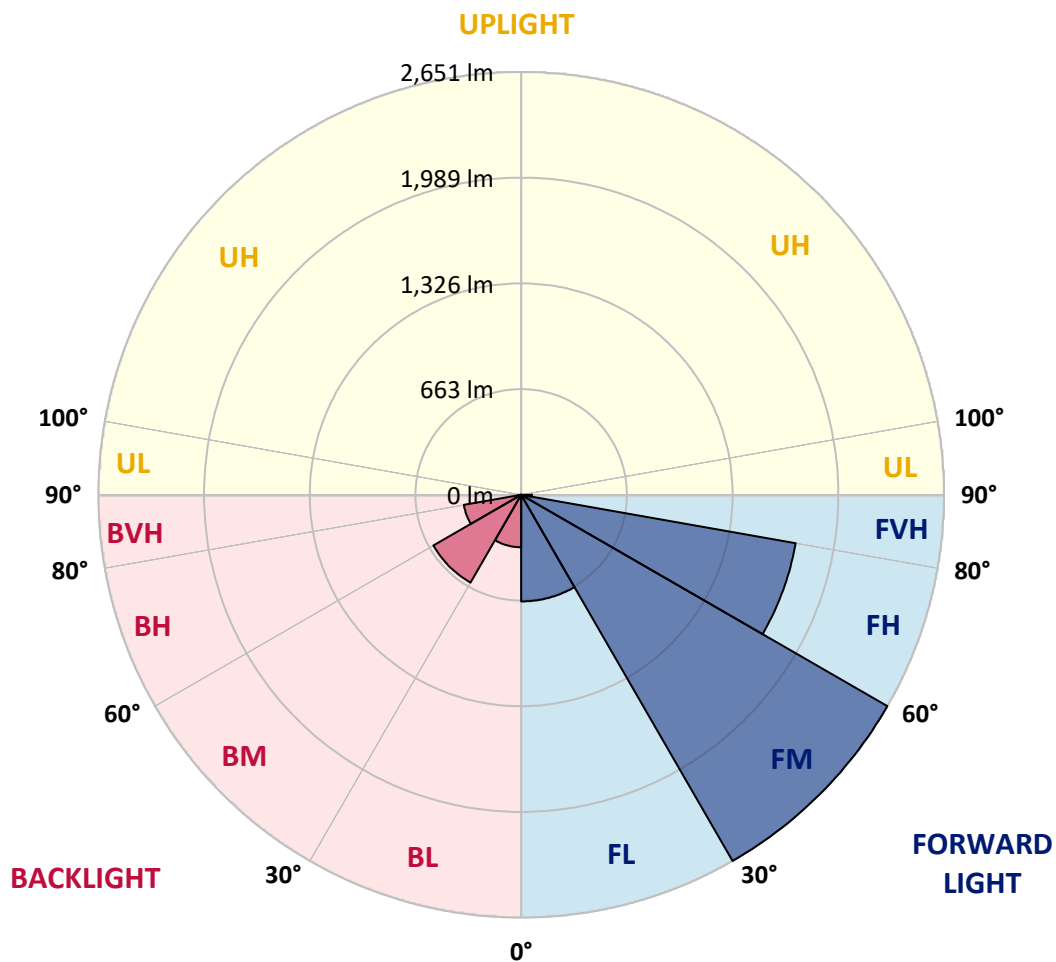
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	668.5	10.3			
FM	(30°-60°)	2651.4	40.9			
FH	(60°-80°)	1747.8	27.0			G1/1800
FVH	(80°-90°)	68.1	1.1			G1/100
BL	(0°-30°)	328.9	5.1	B1/500		
BM	(30°-60°)	635.5	9.8	B1/1000		
BH	(60°-80°)	364.7	5.6	B1/500		G1/500
BVH	(80°-90°)	18.0	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°	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6
2.5°	1238.8	1239.9	1240.4	1220.9	1210.3	1198.1	1186.5	1173.8	1160.6	1155.8	1138.3
5°	1315.0	1316.1	1312.9	1294.9	1275.3	1257.4	1235.1	1212.4	1190.2	1183.8	1154.2
7.5°	1388.5	1388.0	1385.4	1362.6	1338.3	1314.5	1283.3	1252.6	1223.5	1213.4	1169.5
10°	1449.4	1450.4	1452.0	1427.7	1403.9	1375.3	1337.2	1291.7	1258.4	1242.5	1185.4
12.5°	1516.0	1512.8	1517.1	1493.3	1460.5	1434.6	1400.2	1346.7	1307.1	1287.0	1216.1
15°	1592.2	1592.2	1586.4	1566.8	1533.5	1501.7	1467.4	1418.2	1370.6	1339.9	1257.4
17.5°	1644.6	1641.4	1639.8	1622.9	1594.3	1566.8	1540.4	1490.1	1438.3	1400.7	1296.0
20°	1666.8	1667.8	1675.2	1663.1	1647.7	1631.3	1602.2	1563.1	1506.0	1465.8	1337.2
22.5°	1709.6	1710.7	1719.7	1711.2	1707.0	1702.7	1675.8	1641.4	1580.6	1541.9	1389.1
25°	1712.3	1713.3	1737.7	1751.4	1773.1	1783.1	1764.6	1735.0	1673.1	1635.6	1466.3
27.5°	1720.2	1723.4	1748.2	1786.3	1843.4	1863.5	1853.0	1851.9	1799.5	1759.9	1566.8
30°	1713.3	1716.5	1752.5	1805.4	1884.7	1944.0	1956.1	1987.3	1966.2	1936.5	1706.4
32.5°	1664.7	1676.3	1719.1	1803.2	1920.1	2027.5	2066.7	2173.5	2205.3	2208.4	1986.8
35°	1576.3	1582.7	1660.4	1778.9	1944.0	2106.3	2214.3	2411.6	2545.9	2540.1	2297.3
37.5°	1509.1	1511.3	1591.1	1737.7	1957.2	2191.0	2382.5	2698.3	2852.7	2859.6	2577.7
40°	1422.9	1438.3	1515.0	1687.9	1949.8	2262.4	2549.6	2965.4	3145.2	3137.8	2823.6
42.5°	1342.5	1351.5	1427.7	1610.2	1922.8	2316.9	2713.6	3224.1	3400.7	3376.4	3059.5
45°	1258.9	1274.3	1344.1	1509.7	1869.4	2347.6	2862.2	3469.5	3631.4	3601.2	3267.4
47.5°	1175.4	1186.5	1260.5	1417.6	1768.9	2346.5	3008.2	3699.6	3836.1	3814.9	3464.2
50°	894.5	918.8	1113.5	1321.4	1627.6	2302.1	3126.2	3918.1	4050.8	4018.0	3656.2
52.5°	819.9	827.8	882.3	1209.7	1476.9	2196.3	3218.2	4123.3	4240.2	4202.6	3837.1
55°	774.9	784.5	806.7	983.3	1353.1	2022.2	3256.3	4314.8	4402.1	4364.0	3998.5
57.5°	715.2	724.7	768.6	846.9	1224.0	1757.2	3200.2	4484.6	4545.4	4503.6	4148.2
60°	673.9	678.1	720.5	781.8	1082.8	1489.6	3013.0	4622.6	4686.1	4636.4	4296.3
62.5°	635.8	640.6	670.7	731.6	965.9	1293.3	2721.5	4656.5	4786.1	4747.5	4431.7
65°	591.9	596.1	623.7	677.6	875.4	1165.3	2421.1	4604.7	4816.8	4772.9	4484.0
67.5°	533.7	539.5	561.2	609.9	757.0	1020.4	1974.1	4508.9	4682.4	4636.9	4376.7
70°	461.8	464.4	490.4	534.3	639.5	885.5	1548.3	4168.3	4416.3	4366.1	4074.1
72.5°	372.9	377.7	405.7	451.7	525.3	729.4	1106.1	3601.7	4079.4	4060.3	3633.5
75°	249.1	267.7	334.3	380.9	434.3	569.7	742.7	2527.9	3641.9	3656.7	3104.0
77.5°	47.6	49.2	140.2	208.4	253.9	348.1	459.7	1242.0	2400.4	2660.2	2340.7
80°	31.2	33.9	59.8	146.0	168.2	172.4	235.9	544.3	904.5	1144.2	1349.9
82.5°	16.4	19.6	36.0	84.6	77.2	42.8	77.2	280.9	501.5	576.0	680.8
85°	6.9	7.9	17.5	29.1	21.7	18.0	18.0	112.1	222.2	257.1	267.1
87.5°	1.1	1.1	3.7	5.3	3.2	2.1	1.6	0.5	0.5	0.5	0.5
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°	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6	1142.6
2.5°	1138.3	1128.8	1115.6	1100.3	1089.1	1083.3	1078.6	1065.9	1061.6	1070.1	1068.0
5°	1143.1	1132.0	1101.8	1077.0	1052.1	1036.8	1019.8	997.6	988.1	993.4	991.8
7.5°	1146.3	1132.5	1087.6	1048.9	1007.2	978.1	955.8	926.7	912.5	917.8	911.4
10°	1151.0	1130.4	1070.6	1019.3	964.8	922.5	889.7	855.9	841.1	845.3	840.0
12.5°	1171.1	1137.8	1062.7	993.9	927.3	874.4	833.1	797.2	776.0	780.2	776.0
15°	1203.9	1152.6	1051.1	961.7	887.6	827.3	779.7	738.4	714.1	719.9	714.6
17.5°	1238.3	1170.6	1040.5	925.7	845.3	778.1	728.4	693.5	654.3	658.0	650.1
20°	1267.9	1187.5	1034.7	891.8	805.6	725.7	666.0	642.2	588.2	574.5	565.5
22.5°	1309.2	1212.4	1029.9	864.3	756.4	673.4	602.5	558.1	499.9	470.8	468.1
25°	1367.9	1249.4	1029.4	842.6	712.0	618.4	519.4	444.9	393.6	359.2	354.4
27.5°	1442.5	1298.6	1035.2	821.0	667.6	549.1	417.4	334.8	288.8	262.4	257.6
30°	1549.9	1363.1	1042.6	796.1	617.8	459.1	311.0	246.5	208.4	189.4	185.7
32.5°	1780.0	1528.7	1053.7	770.2	558.1	345.9	225.9	178.8	149.7	138.1	143.9
35°	2057.2	1753.5	1103.4	736.9	479.8	246.5	162.9	127.5	107.4	110.0	113.2
37.5°	2299.4	1968.3	1215.0	694.0	375.0	180.9	112.1	95.2	95.2	103.7	111.1
40°	2527.9	2161.9	1315.0	635.8	262.9	124.8	86.8	88.3	86.8	92.0	90.5
42.5°	2743.7	2345.4	1393.3	566.5	171.9	86.2	78.8	82.0	79.3	80.4	75.6
45°	2947.9	2535.3	1436.7	464.4	114.3	75.1	72.5	77.8	77.2	76.2	71.4
47.5°	3136.8	2702.5	1458.4	334.8	78.8	67.7	68.2	71.9	73.5	72.5	69.8
50°	3321.9	2869.1	1438.8	200.5	70.9	61.9	65.6	65.6	68.8	62.9	60.8
52.5°	3499.1	3036.3	1376.9	121.7	65.1	57.7	60.8	59.8	61.4	55.5	54.5
55°	3665.7	3160.6	1254.7	95.7	61.4	55.0	55.5	56.6	54.0	47.6	49.7
57.5°	3841.9	3266.4	1084.4	86.8	59.8	51.3	52.4	51.8	47.6	41.8	41.8
60°	3986.8	3343.1	913.5	78.8	58.7	50.3	46.5	45.5	39.1	36.0	35.4
62.5°	4086.8	3364.8	746.9	70.4	55.5	46.5	41.8	38.6	32.8	29.6	28.6
65°	4094.7	3272.2	568.6	63.5	52.4	43.4	38.6	31.7	25.9	23.3	22.2
67.5°	3932.3	3015.1	401.0	58.2	47.1	40.2	33.9	25.4	20.6	18.5	18.0
70°	3592.7	2695.6	245.4	50.8	42.8	37.6	34.9	20.6	16.9	14.3	14.3
72.5°	3152.6	2334.9	143.9	43.4	36.0	30.2	23.3	17.5	14.3	11.1	11.1
75°	2702.0	1853.5	88.3	32.8	26.4	23.8	18.0	14.8	11.6	8.5	8.5
77.5°	1945.5	1368.4	68.8	21.2	16.4	16.9	13.2	11.6	9.5	6.9	6.9
80°	1193.9	833.1	49.2	14.3	9.5	9.5	9.5	9.0	6.9	5.8	5.3
82.5°	605.1	380.9	24.3	8.5	5.8	5.8	5.8	6.3	5.3	4.2	4.2
85°	212.6	106.9	7.4	4.2	3.7	3.7	3.2	3.2	2.6	2.1	2.1
87.5°	0.5	1.1	1.1	1.6	2.1	2.1	1.6	1.1	0.5	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)