

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: P233676

Luminaire Tested: **VRDN-C016-D-UNV-T2-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233676
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-C016-D-UNV-T2-7030-HSS
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 950mA LED AND TYPE II OPTIC WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4295 lumens
Efficiency: N/A
Efficacy: 110.1 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

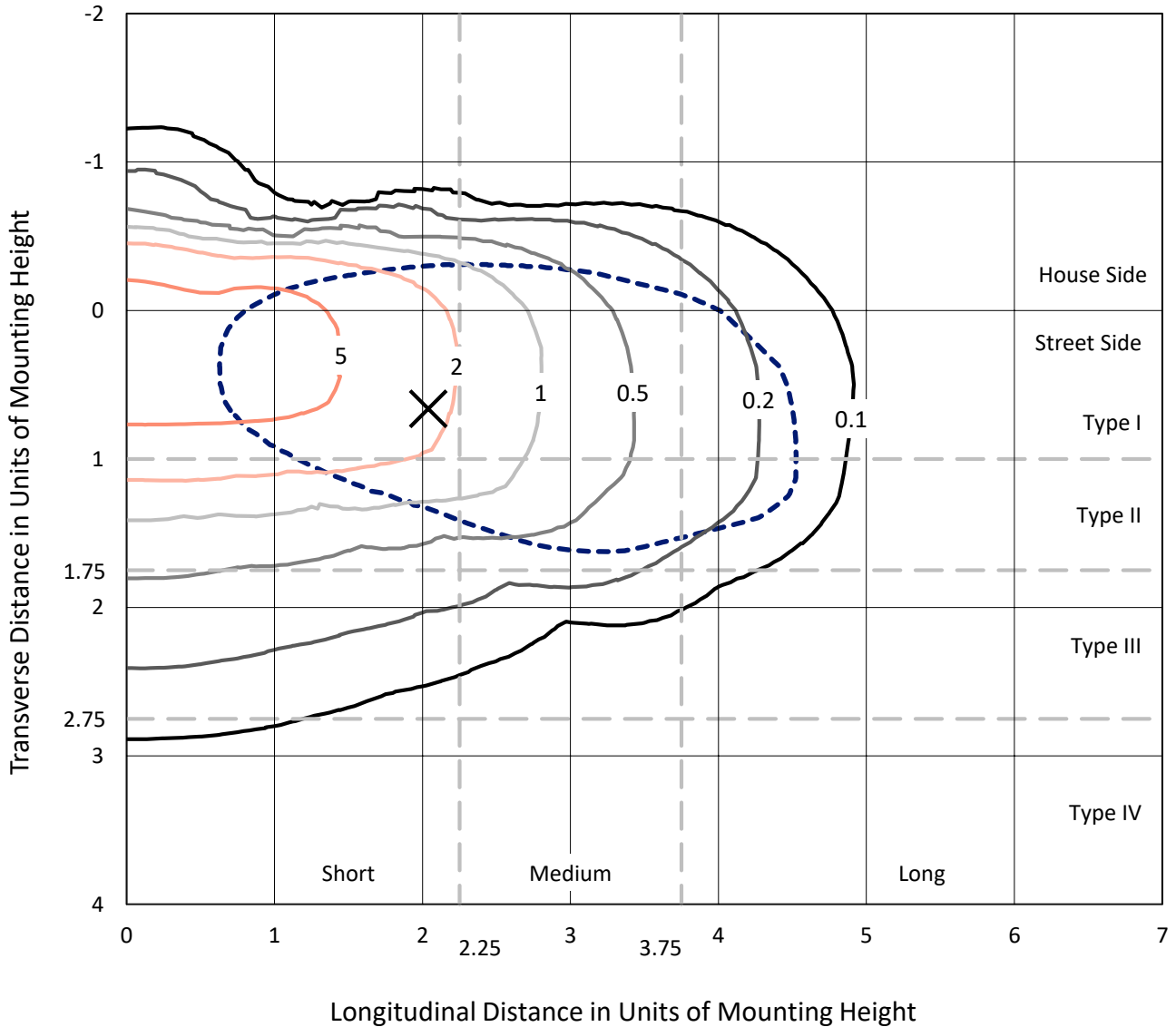
Input Watts (W): 39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P233676
 CATALOG NUMBER: VRDN-C016-D-UNV-T2-7030-HSS

Iso-Footcandle Lines of Horizontal Illumination

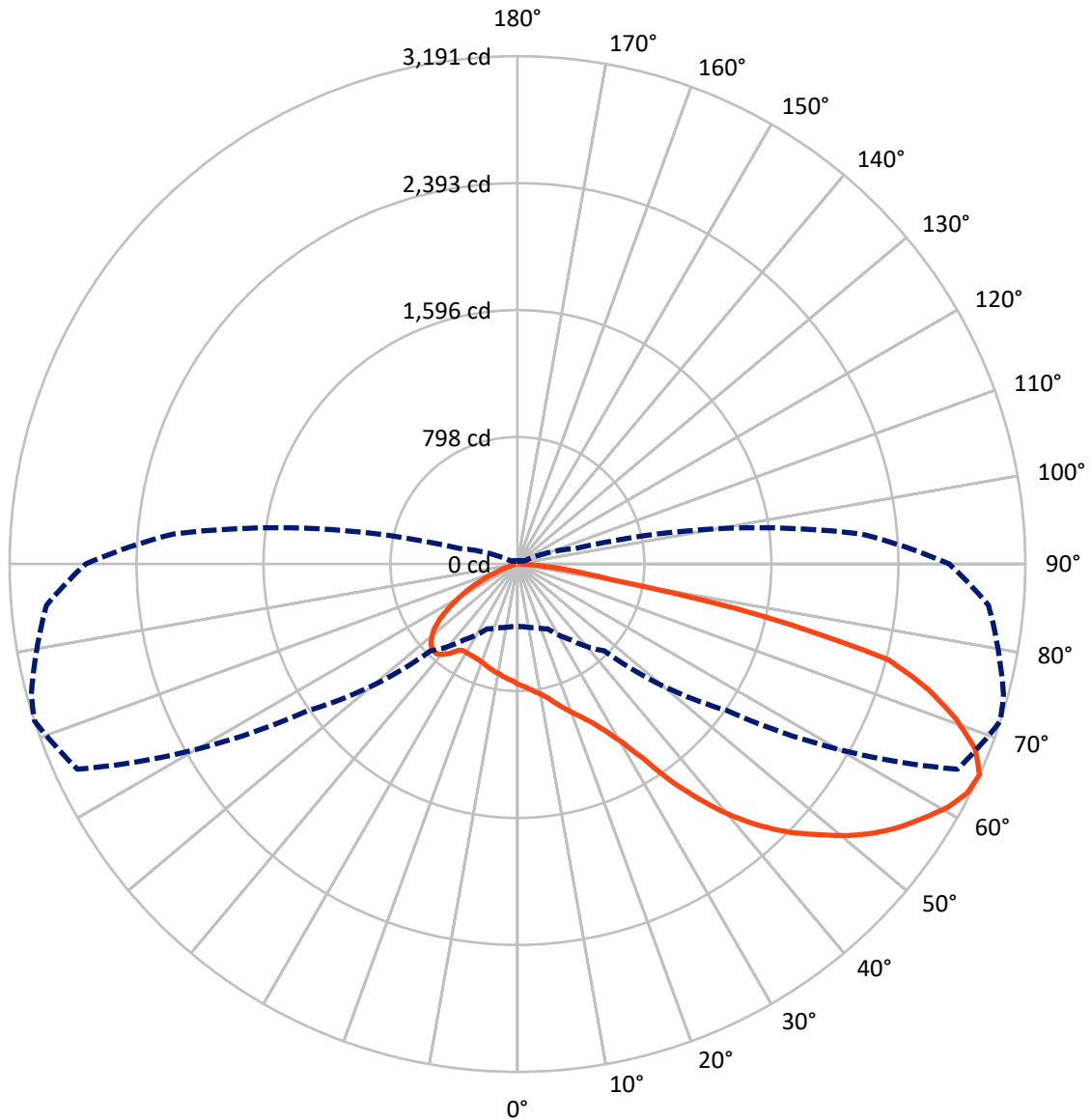
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.5 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P233676
CATALOG NUMBER: VRDN-C016-D-UNV-T2-7030-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P233676

CATALOG NUMBER: VRDN-C016-D-UNV-T2-7030-HSS

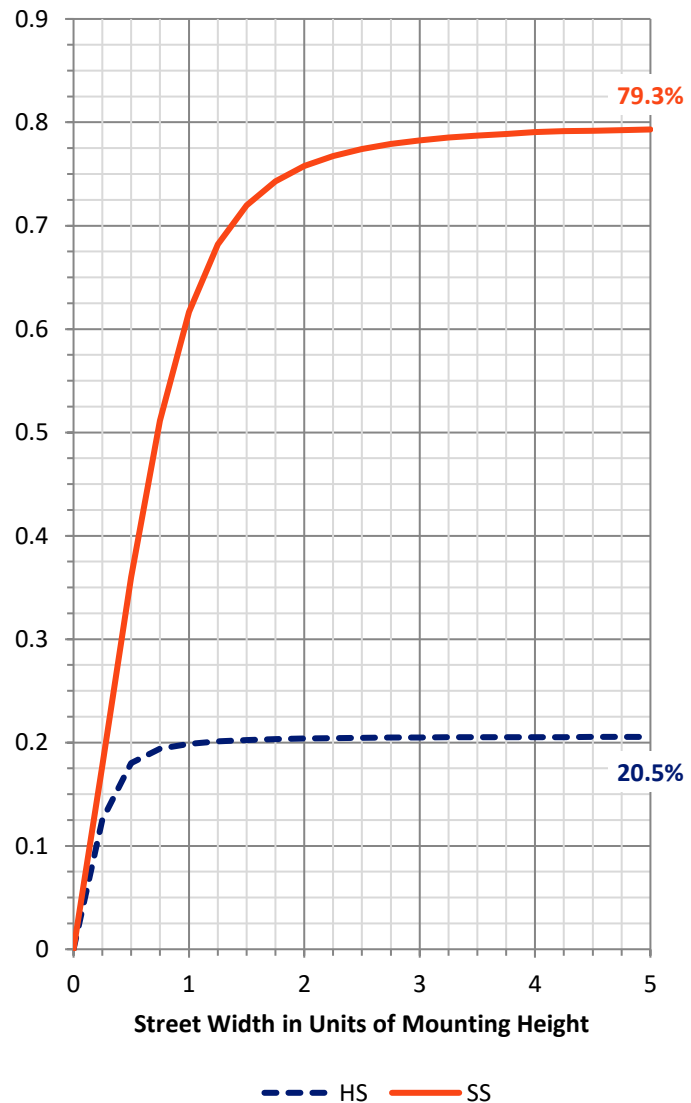
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	892.5	0.0	892.5
	% Fixture	20.8	0.0	20.8
Street Side	Lumens	3402.5	0.0	3402.5
	% Fixture	79.2	0.0	79.2
Total	Lumens	4295.0	0.0	4295.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.6	1.7
10°-20°	220.2	5.1
20°-30°	368.0	8.6
30°-40°	544.4	12.7
40°-50°	752.6	17.5
50°-60°	880.6	20.5
60°-70°	875.3	20.4
70°-80°	524.3	12.2
80°-90°	57.1	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°	4295.0	100.0
0°-180°	4295.0	100.0



REPORT NUMBER: P233676

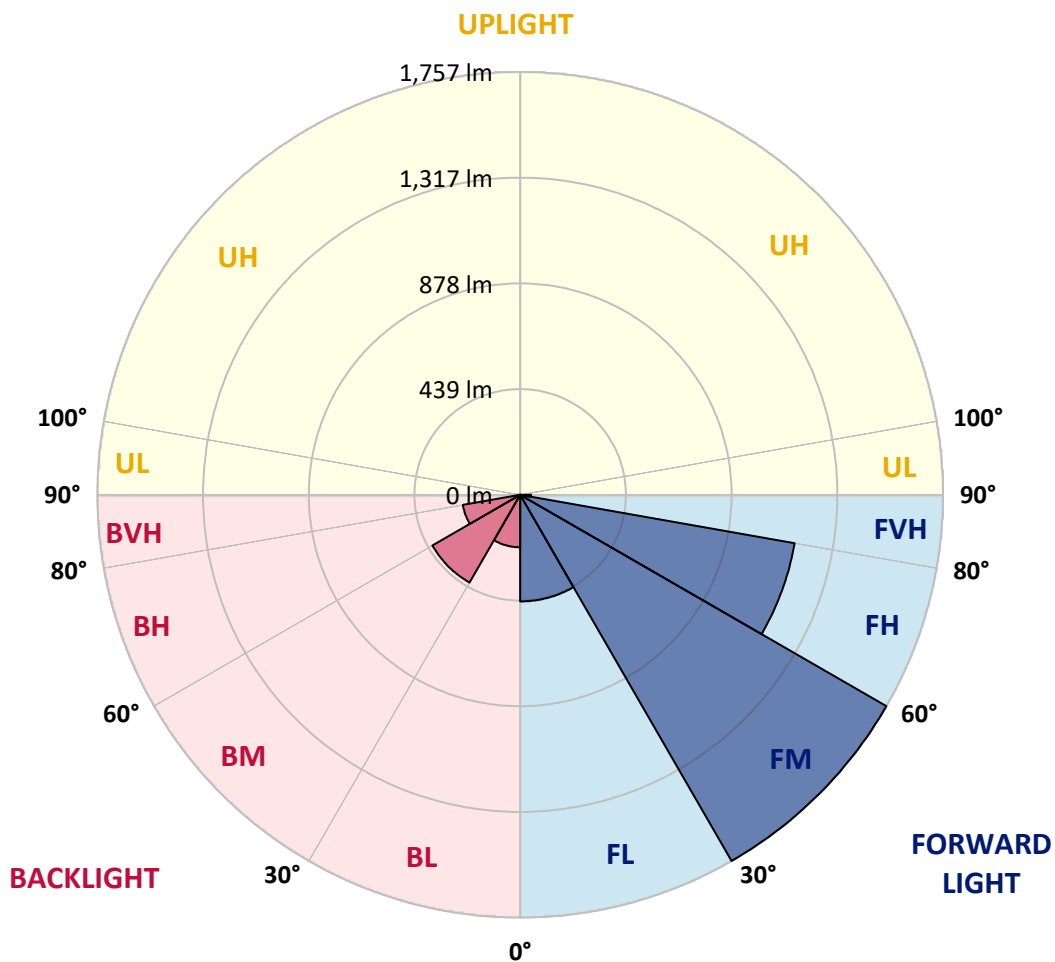
CATALOG NUMBER: VRDN-C016-D-UNV-T2-7030-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	442.9	10.3			
FM	(30°-60°)	1756.5	40.9			
FH	(60°-80°)	1157.9	27.0			G1/1800
FVH	(80°-90°)	45.1	1.1			G1/100
BL	(0°-30°)	217.9	5.1	B1/500		
BM	(30°-60°)	421.0	9.8	B1/1000		
BH	(60°-80°)	241.6	5.6	B1/500		G1/500
BVH	(80°-90°)	12.0	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





REPORT NUMBER: P233676

CATALOG NUMBER: VRDN-C016-D-UNV-T2-7030-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	72°	75°	85°
0°	757.0	757.0	757.0	757.0	757.0	757.0	757.0	757.0	757.0	757.0	757.0
2.5°	820.7	821.4	821.8	808.8	801.8	793.7	786.0	777.6	768.9	765.7	754.1
5°	871.2	871.9	869.8	857.9	844.9	833.0	818.3	803.2	788.5	784.3	764.7
7.5°	919.9	919.6	917.8	902.7	886.6	870.8	850.2	829.8	810.6	803.9	774.8
10°	960.2	960.9	962.0	945.8	930.1	911.1	885.9	855.8	833.7	823.2	785.3
12.5°	1004.4	1002.3	1005.1	989.3	967.6	950.4	927.6	892.2	865.9	852.6	805.7
15°	1054.8	1054.8	1051.0	1038.0	1015.9	994.9	972.1	939.5	908.0	887.7	833.0
17.5°	1089.5	1087.4	1086.4	1075.2	1056.2	1038.0	1020.5	987.2	952.8	928.0	858.6
20°	1104.2	1104.9	1109.8	1101.8	1091.6	1080.8	1061.5	1035.6	997.7	971.1	885.9
22.5°	1132.6	1133.3	1139.3	1133.7	1130.9	1128.1	1110.2	1087.4	1047.1	1021.5	920.3
25°	1134.4	1135.1	1151.2	1160.3	1174.7	1181.3	1169.1	1149.4	1108.4	1083.6	971.4
27.5°	1139.6	1141.7	1158.2	1183.4	1221.3	1234.6	1227.6	1226.9	1192.2	1165.9	1038.0
30°	1135.1	1137.2	1161.0	1196.1	1248.6	1287.9	1295.9	1316.6	1302.6	1283.0	1130.5
32.5°	1102.8	1110.5	1138.9	1194.7	1272.1	1343.2	1369.2	1440.0	1461.0	1463.1	1316.3
35°	1044.3	1048.5	1100.0	1178.5	1287.9	1395.5	1466.9	1597.7	1686.7	1682.8	1522.0
37.5°	999.8	1001.2	1054.1	1151.2	1296.6	1451.5	1578.4	1787.6	1889.9	1894.5	1707.7
40°	942.7	952.8	1003.7	1118.3	1291.7	1498.8	1689.1	1964.6	2083.7	2078.8	1870.7
42.5°	889.4	895.4	945.8	1066.7	1273.9	1534.9	1797.8	2135.9	2253.0	2236.9	2027.0
45°	834.1	844.2	890.5	1000.2	1238.5	1555.3	1896.2	2298.5	2405.8	2385.8	2164.7
47.5°	778.7	786.0	835.1	939.2	1171.9	1554.6	1993.0	2451.0	2541.4	2527.4	2295.0
50°	592.6	608.7	737.7	875.4	1078.3	1525.1	2071.1	2595.7	2683.7	2662.0	2422.3
52.5°	543.2	548.4	584.5	801.5	978.4	1455.0	2132.1	2731.7	2809.1	2784.3	2542.1
55°	513.4	519.7	534.4	651.5	896.4	1339.7	2157.3	2858.5	2916.4	2891.1	2649.0
57.5°	473.8	480.1	509.2	561.1	810.9	1164.2	2120.2	2971.0	3011.3	2983.7	2748.2
60°	446.5	449.3	477.3	518.0	717.4	986.8	1996.1	3062.5	3104.6	3071.6	2846.3
62.5°	421.2	424.4	444.4	484.7	639.9	856.8	1803.0	3084.9	3170.8	3145.2	2936.0
65°	392.1	394.9	413.2	448.9	580.0	772.0	1604.0	3050.6	3191.1	3162.0	2970.7
67.5°	353.6	357.5	371.8	404.1	501.5	676.0	1307.8	2987.2	3102.1	3072.0	2899.6
70°	305.9	307.7	324.9	353.9	423.7	586.6	1025.7	2761.5	2925.8	2892.5	2699.1
72.5°	247.1	250.2	268.8	299.3	348.0	483.3	732.8	2386.2	2702.6	2690.0	2407.2
75°	165.1	177.3	221.5	252.3	287.7	377.4	492.0	1674.8	2412.8	2422.6	2056.4
77.5°	31.5	32.6	92.9	138.1	168.2	230.6	304.5	822.8	1590.3	1762.4	1550.7
80°	20.7	22.4	39.6	96.7	111.4	114.2	156.3	360.6	599.3	758.0	894.3
82.5°	10.9	13.0	23.8	56.1	51.2	28.4	51.2	186.1	332.2	381.6	451.0
85°	4.6	5.3	11.6	19.3	14.4	11.9	11.9	74.3	147.2	170.3	177.0
87.5°	0.7	0.7	2.5	3.5	2.1	1.4	1.1	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



REPORT NUMBER: P233676

CATALOG NUMBER: VRDN-C016-D-UNV-T2-7030-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	757.0	757.0	757.0	757.0	757.0	757.0	757.0	757.0	757.0	757.0	757.0
2.5°	754.1	747.8	739.1	728.9	721.6	717.7	714.5	706.1	703.3	708.9	707.5
5°	757.3	749.9	730.0	713.5	697.0	686.9	675.7	660.9	654.6	658.1	657.1
7.5°	759.4	750.3	720.5	694.9	667.2	648.0	633.2	614.0	604.5	608.0	603.8
10°	762.6	748.9	709.3	675.3	639.2	611.2	589.4	567.0	557.2	560.0	556.5
12.5°	775.9	753.8	704.0	658.5	614.3	579.3	551.9	528.1	514.1	516.9	514.1
15°	797.6	763.6	696.3	637.1	588.0	548.1	516.6	489.2	473.1	477.0	473.4
17.5°	820.4	775.5	689.3	613.3	560.0	515.5	482.6	459.4	433.5	435.9	430.7
20°	840.0	786.7	685.5	590.8	533.7	480.8	441.2	425.4	389.7	380.6	374.6
22.5°	867.3	803.2	682.3	572.6	501.1	446.1	399.2	369.7	331.2	311.9	310.1
25°	906.2	827.7	682.0	558.3	471.7	409.7	344.1	294.7	260.7	237.9	234.8
27.5°	955.7	860.3	685.8	543.9	442.3	363.8	276.5	221.8	191.3	173.8	170.7
30°	1026.8	903.1	690.7	527.4	409.3	304.2	206.1	163.3	138.1	125.5	123.0
32.5°	1179.2	1012.8	698.1	510.2	369.7	229.2	149.6	118.4	99.2	91.5	95.3
35°	1362.9	1161.7	731.0	488.2	317.9	163.3	107.9	84.5	71.1	72.9	75.0
37.5°	1523.4	1304.0	805.0	459.8	248.5	119.9	74.3	63.1	63.1	68.7	73.6
40°	1674.8	1432.3	871.2	421.2	174.2	82.7	57.5	58.5	57.5	61.0	59.9
42.5°	1817.7	1553.9	923.1	375.3	113.9	57.1	52.2	54.3	52.6	53.3	50.1
45°	1953.0	1679.7	951.8	307.7	75.7	49.8	48.0	51.5	51.2	50.5	47.3
47.5°	2078.1	1790.4	966.2	221.8	52.2	44.9	45.2	47.7	48.7	48.0	46.3
50°	2200.8	1900.8	953.2	132.8	47.0	41.0	43.5	43.5	45.6	41.7	40.3
52.5°	2318.2	2011.5	912.2	80.6	43.1	38.2	40.3	39.6	40.7	36.8	36.1
55°	2428.6	2093.9	831.2	63.4	40.7	36.4	36.8	37.5	35.7	31.5	32.9
57.5°	2545.3	2164.0	718.4	57.5	39.6	34.0	34.7	34.3	31.5	27.7	27.7
60°	2641.3	2214.8	605.2	52.2	38.9	33.3	30.8	30.1	25.9	23.8	23.5
62.5°	2707.5	2229.2	494.8	46.6	36.8	30.8	27.7	25.6	21.7	19.6	18.9
65°	2712.8	2167.8	376.7	42.1	34.7	28.7	25.6	21.0	17.2	15.4	14.7
67.5°	2605.2	1997.5	265.6	38.5	31.2	26.6	22.4	16.8	13.7	12.3	11.9
70°	2380.2	1785.8	162.6	33.6	28.4	24.9	23.1	13.7	11.2	9.5	9.5
72.5°	2088.6	1546.8	95.3	28.7	23.8	20.0	15.4	11.6	9.5	7.4	7.4
75°	1790.1	1227.9	58.5	21.7	17.5	15.8	11.9	9.8	7.7	5.6	5.6
77.5°	1288.9	906.6	45.6	14.0	10.9	11.2	8.8	7.7	6.3	4.6	4.6
80°	790.9	551.9	32.6	9.5	6.3	6.3	6.3	6.0	4.6	3.9	3.5
82.5°	400.9	252.3	16.1	5.6	3.9	3.9	3.9	4.2	3.5	2.8	2.8
85°	140.9	70.8	4.9	2.8	2.5	2.5	2.1	2.1	1.8	1.4	1.4
87.5°	0.4	0.7	0.7	1.1	1.4	1.4	1.1	0.7	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)