

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: STREETWORKS

Report Number: P233799

Luminaire Tested: **VERD-C029-D-U-T4-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233799
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1710-389-34)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-C029-D-U-T4-HSS
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1030mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10345 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 IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G3

Input Watts (W): 81
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: 28.75 FT

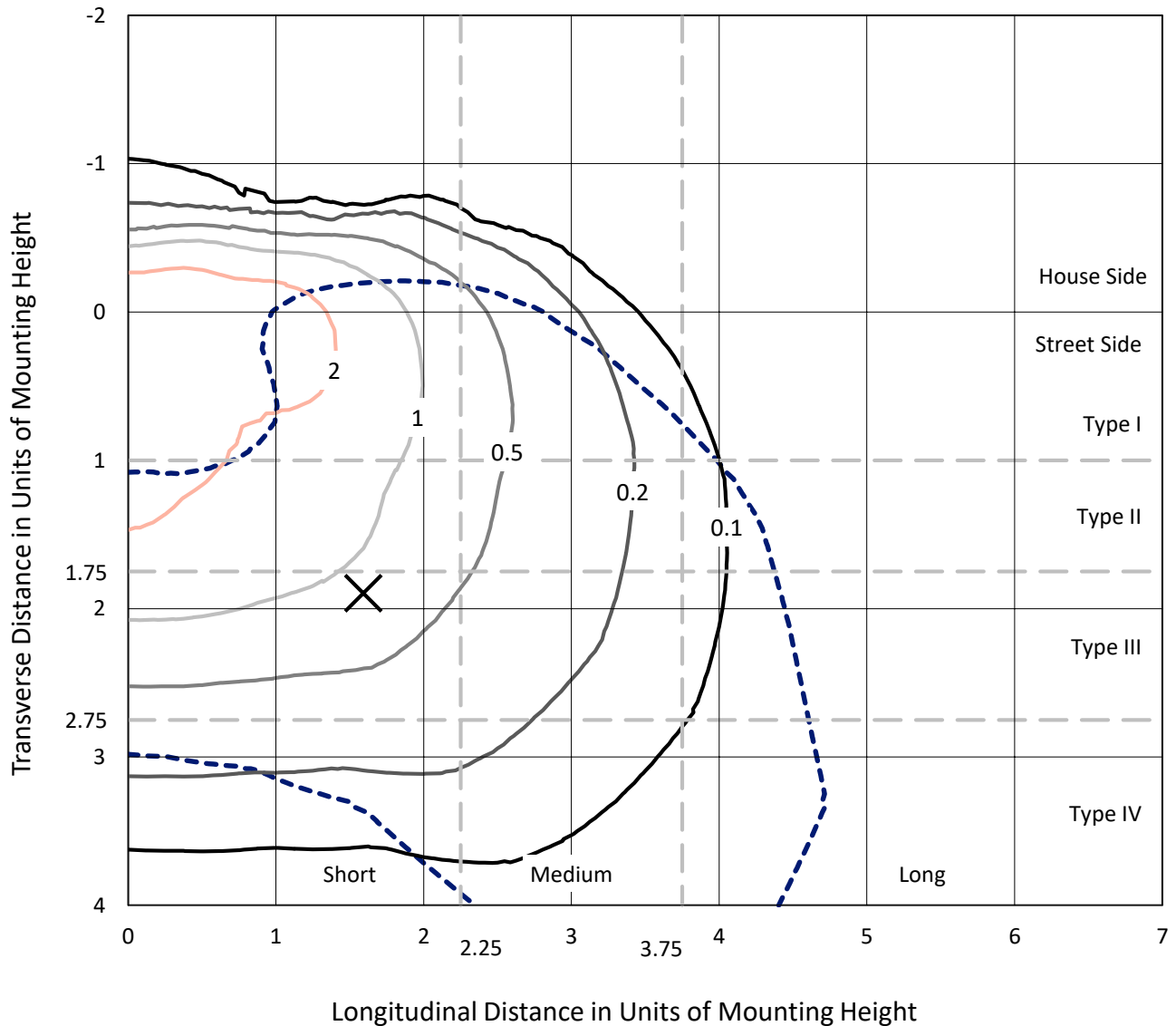


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

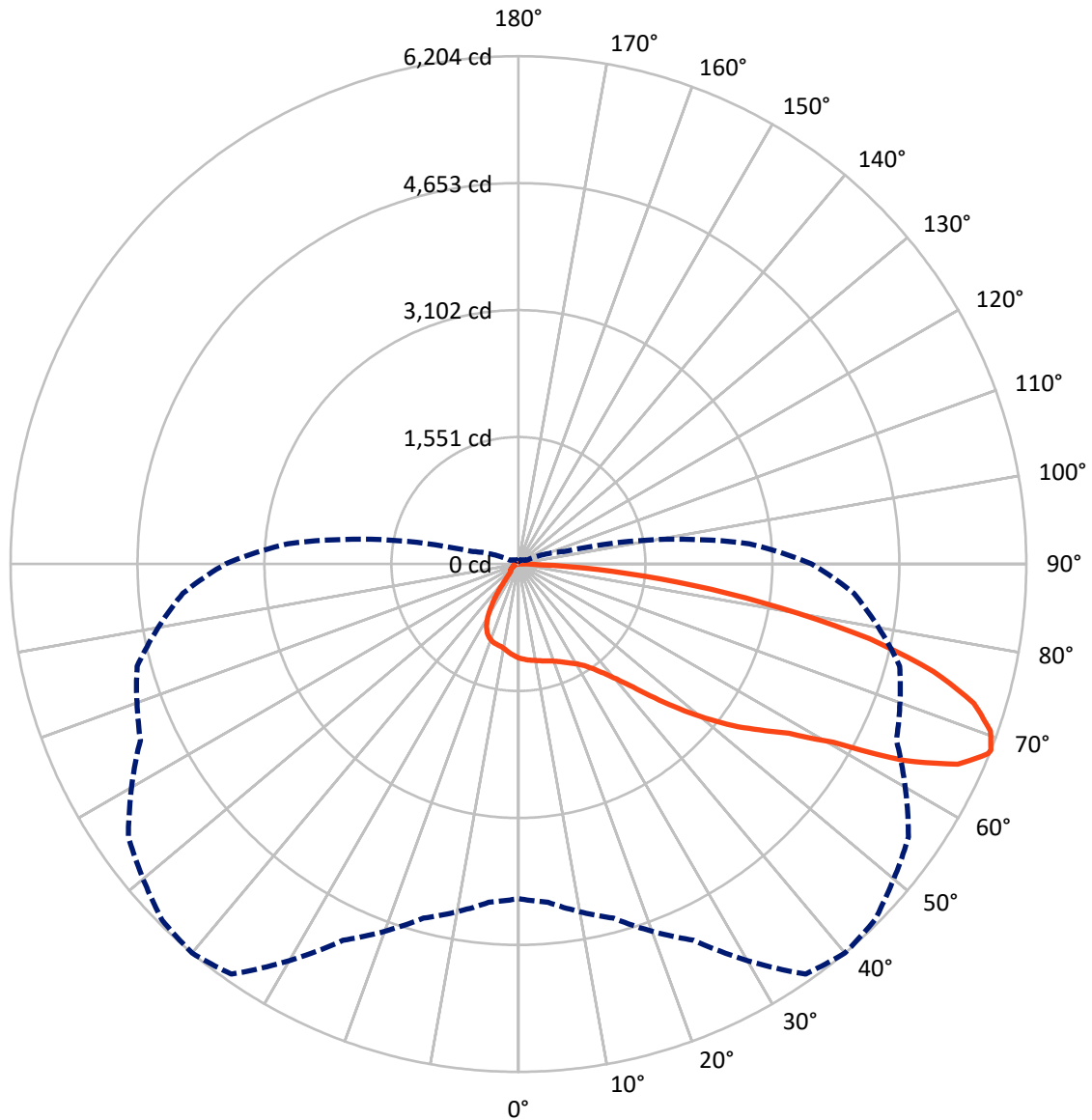


Based on 20 foot mounting height. Maximum calculated value = 3.1 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1678.2	0.0	1678.2
	% Fixture	16.2	0.0	16.2
Street Side	Lumens	8666.8	0.0	8666.8
	% Fixture	83.8	0.0	83.8
Total	Lumens	10345.0	0.0	10345.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.1	1.1
10°-20°	326.6	3.2
20°-30°	548.2	5.3
30°-40°	811.9	7.8
40°-50°	1373.5	13.3
50°-60°	2096.3	20.3
60°-70°	2744.8	26.5
70°-80°	1973.4	19.1
80°-90°	361.2	3.5
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°	10345.0	100.0
0°-180°	10345.0	100.0

Coefficient of Utilization



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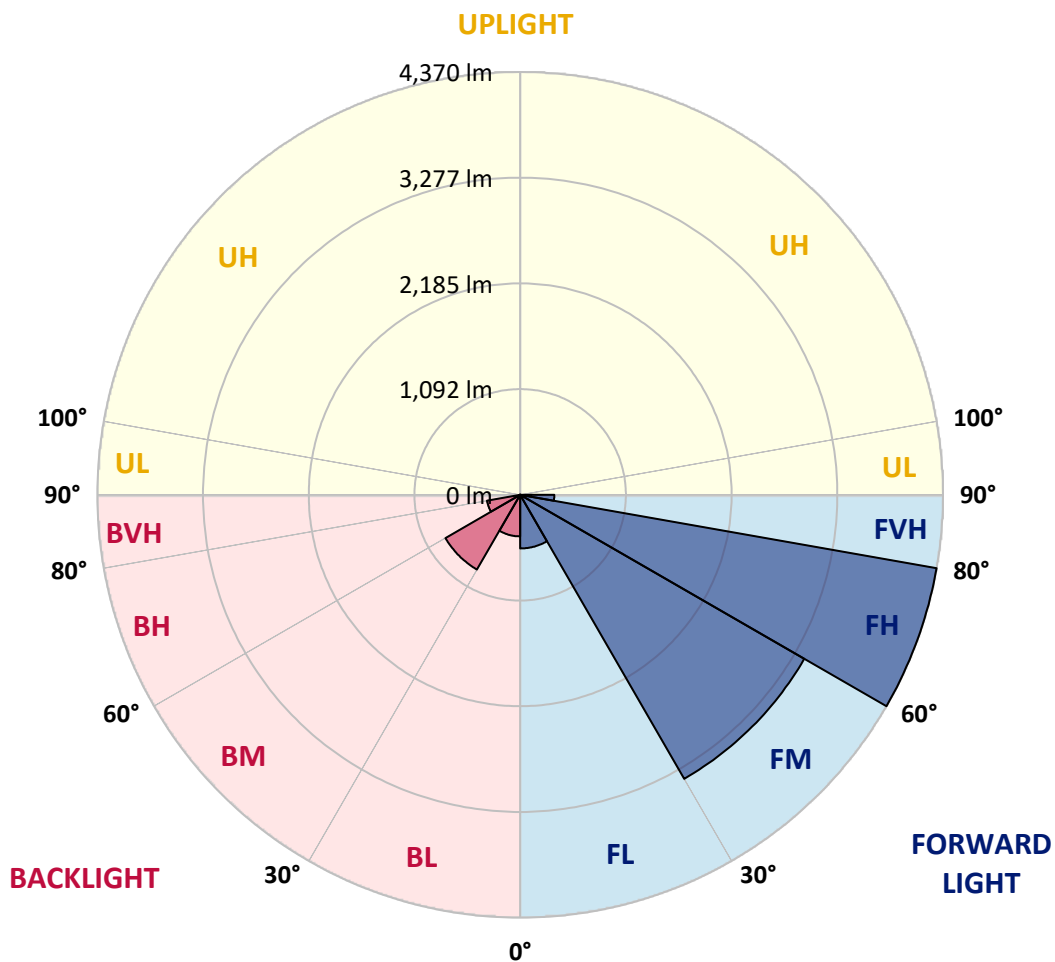
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	554.6	5.4			
FM (30°-60°)	3389.7	32.8			
FH (60°-80°)	4369.9	42.2			G2/5000
FVH (80°-90°)	352.7	3.4			G3/500
BL (0°-30°)	429.4	4.2	B1/500		
BM (30°-60°)	892.0	8.6	B1/1000		
BH (60°-80°)	348.3	3.4	B1/500		G1/500
BVH (80°-90°)	8.6	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-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1149.5	1149.5	1149.5	1149.5	1149.5	1149.5	1149.5	1149.5	1149.5	1149.5	1149.5
2.5°	1185.9	1188.5	1185.0	1176.4	1166.9	1161.7	1160.8	1159.9	1155.6	1149.5	1140.9
5°	1198.0	1198.9	1195.4	1188.5	1179.8	1178.1	1175.5	1176.4	1173.8	1167.7	1158.2
7.5°	1203.2	1205.0	1200.6	1193.7	1186.8	1186.8	1185.9	1188.5	1186.8	1184.2	1172.9
10°	1201.5	1204.1	1201.5	1198.9	1196.3	1198.9	1197.2	1203.2	1204.1	1204.1	1191.1
12.5°	1198.9	1202.4	1203.2	1205.8	1210.2	1212.8	1216.2	1229.2	1235.3	1239.6	1229.2
15°	1201.5	1203.2	1210.2	1214.5	1223.2	1229.2	1237.0	1258.7	1269.1	1281.2	1276.0
17.5°	1212.8	1217.1	1227.5	1231.8	1240.5	1244.8	1254.3	1281.2	1302.0	1323.6	1327.1
20°	1237.0	1239.6	1256.9	1258.7	1263.0	1267.3	1277.7	1307.2	1338.4	1369.6	1378.2
22.5°	1263.9	1269.9	1286.4	1283.8	1292.5	1294.2	1303.7	1335.8	1379.1	1417.2	1436.3
25°	1291.6	1296.8	1313.3	1315.0	1325.4	1332.3	1343.6	1374.8	1430.2	1478.7	1512.5
27.5°	1315.0	1325.4	1341.0	1342.7	1362.6	1371.3	1387.8	1423.3	1490.0	1549.7	1605.2
30°	1358.3	1360.9	1375.6	1380.8	1407.7	1415.5	1434.5	1479.6	1561.0	1635.5	1722.1
32.5°	1412.0	1411.1	1425.0	1433.7	1466.6	1480.4	1504.7	1556.7	1646.8	1739.5	1862.5
35°	1510.8	1502.1	1510.8	1519.4	1557.5	1572.3	1598.3	1676.2	1781.9	1939.6	2091.2
37.5°	1737.7	1724.7	1706.5	1663.2	1672.8	1691.8	1729.9	1835.6	1991.5	2284.3	2430.7
40°	2131.0	2102.4	2026.2	1911.8	1844.3	1846.0	1881.5	2020.1	2248.8	2679.3	2789.4
42.5°	2487.0	2467.1	2375.3	2218.5	2062.6	2053.9	2066.0	2228.0	2529.5	3045.8	3102.9
45°	2822.3	2831.8	2698.4	2575.4	2389.1	2332.0	2317.3	2449.8	2840.5	3372.4	3377.6
47.5°	3132.4	3148.0	2986.9	2870.8	2687.1	2637.8	2591.9	2682.8	3134.1	3650.4	3608.0
50°	3465.9	3478.0	3254.5	3159.3	3005.1	2959.2	2924.5	2964.3	3434.7	3908.6	3813.3
52.5°	3926.8	3859.2	3578.5	3420.9	3284.0	3280.5	3253.7	3278.8	3776.9	4140.7	3969.2
55°	4470.8	4294.1	3996.1	3744.0	3568.1	3577.7	3545.6	3587.2	4115.6	4340.0	4113.9
57.5°	4663.1	4658.8	4520.2	4278.5	3921.6	3899.9	3844.5	3891.2	4408.4	4526.2	4216.1
60°	4929.9	4953.3	4968.9	4823.3	4617.2	4420.5	4235.2	4230.8	4681.3	4696.0	4266.3
62.5°	5102.3	5123.9	5245.2	5226.2	5353.5	5288.5	5077.2	4608.5	4890.0	4806.0	4285.4
65°	4780.0	4833.7	5139.5	5372.6	5806.6	5897.5	5867.2	5188.9	5032.1	4838.1	4249.9
67.5°	4197.0	4267.2	4602.4	5147.3	6087.2	6188.6	6133.1	5773.6	5093.6	4824.2	4152.0
68°	4087.9	4148.5	4477.7	5072.0	6115.8	6204.2	6153.9	5816.9	5096.2	4822.5	4114.7
70°	3562.9	3612.3	3933.7	4685.6	6036.1	6118.4	6111.5	5857.7	5073.7	4768.8	3864.4
72.5°	2764.2	2813.6	3098.6	3886.1	5668.0	5818.7	5812.6	5694.8	5032.1	4495.0	3239.8
75°	1998.5	2053.0	2312.9	2986.0	4904.8	5236.6	5303.3	5415.9	4599.8	3783.0	2305.1
77.5°	1443.2	1483.0	1707.4	2255.7	4006.5	4385.9	4521.0	4634.5	3764.8	2757.3	1096.7
80°	962.4	991.0	1207.6	1677.1	3018.1	3241.6	3387.1	3197.4	2142.3	997.1	118.7
82.5°	592.5	610.7	781.4	1176.4	2087.7	2157.9	2158.7	1705.7	690.4	95.3	64.1
85°	317.9	324.0	424.5	641.9	1102.8	1155.6	1134.8	716.4	139.5	51.1	34.7
87.5°	51.1	55.4	133.4	240.8	340.4	262.5	168.1	52.8	13.9	7.8	5.2
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°	1149.5	1149.5	1149.5	1149.5	1149.5	1149.5	1149.5	1149.5	1149.5	1149.5	1149.5
2.5°	1145.2	1142.6	1135.7	1132.2	1123.5	1126.1	1126.1	1119.2	1122.7	1136.5	1134.8
5°	1155.6	1156.5	1140.0	1131.3	1112.3	1107.1	1099.3	1088.9	1088.0	1097.6	1098.4
7.5°	1164.3	1168.6	1145.2	1127.9	1101.9	1083.7	1068.1	1049.9	1045.6	1051.6	1051.6
10°	1178.1	1182.4	1153.0	1128.7	1090.6	1061.2	1034.3	1010.9	1001.4	1001.4	1002.3
12.5°	1214.5	1211.9	1178.1	1140.9	1095.8	1049.0	1006.6	975.4	952.9	952.0	948.6
15°	1264.7	1255.2	1222.3	1166.0	1107.9	1048.2	989.3	940.8	901.8	891.4	887.1
17.5°	1318.5	1306.3	1266.5	1198.0	1127.0	1047.3	969.3	901.8	836.8	811.7	803.9
20°	1376.5	1361.8	1321.0	1235.3	1146.1	1041.2	939.9	845.5	757.1	709.5	697.3
22.5°	1440.6	1428.5	1379.1	1273.4	1159.1	1028.3	894.0	774.4	661.8	593.4	588.2
25°	1523.8	1512.5	1439.7	1307.2	1159.9	1004.0	833.3	683.5	542.3	461.7	445.3
27.5°	1623.4	1603.5	1488.2	1328.0	1146.1	961.6	754.5	562.2	402.8	335.2	333.5
30°	1731.7	1695.3	1527.2	1333.2	1114.9	894.0	646.2	413.2	285.9	240.0	240.0
32.5°	1859.0	1792.3	1567.1	1324.5	1063.8	800.4	494.6	286.7	196.6	175.0	175.0
35°	2045.2	1942.2	1618.2	1302.9	991.9	671.4	351.7	189.7	155.1	152.5	152.5
37.5°	2339.8	2168.3	1687.5	1266.5	893.1	512.0	228.7	146.4	148.1	148.1	147.3
40°	2653.4	2429.9	1782.8	1208.4	769.2	353.4	149.9	138.6	141.2	142.9	142.1
42.5°	2936.6	2678.5	1886.7	1130.5	622.8	222.6	136.9	133.4	131.7	133.4	134.3
45°	3181.8	2894.2	1991.5	1029.1	460.0	145.5	133.4	125.6	120.4	121.3	122.1
47.5°	3391.4	3064.0	2062.6	922.6	304.9	129.1	129.1	115.2	110.0	110.0	110.0
50°	3575.1	3214.7	2105.9	795.2	181.9	127.3	121.3	105.7	100.5	99.6	100.5
52.5°	3708.5	3320.4	2100.7	640.2	122.1	123.0	110.9	97.0	91.0	92.7	93.6
55°	3814.2	3387.1	2054.8	468.6	114.3	115.2	103.1	87.5	83.2	84.0	84.0
57.5°	3880.9	3403.5	1961.2	304.9	111.7	103.1	92.7	78.0	72.8	72.8	72.8
60°	3902.5	3394.9	1833.9	194.9	110.9	92.7	84.0	70.2	65.0	65.0	65.0
62.5°	3884.3	3344.6	1618.2	140.3	103.1	86.6	76.2	62.4	57.2	55.4	55.4
65°	3819.3	3210.4	1247.4	116.1	92.7	79.7	69.3	56.3	49.4	46.8	45.9
67.5°	3629.6	2919.3	725.9	109.1	84.0	72.8	64.1	51.1	43.3	39.0	38.1
68°	3580.3	2832.7	596.9	108.3	84.0	71.9	63.2	49.4	41.6	37.2	36.4
70°	3226.8	2285.2	171.5	103.1	82.3	69.3	58.0	45.0	37.2	32.1	31.2
72.5°	2429.9	1339.2	107.4	91.8	81.4	61.5	56.3	45.0	32.9	27.7	26.0
75°	1356.6	304.9	91.0	68.4	76.2	60.6	55.4	40.7	29.5	22.5	21.7
77.5°	278.9	88.4	78.0	47.6	58.0	52.8	46.8	34.7	26.9	17.3	16.5
80°	78.8	65.8	69.3	34.7	32.9	37.2	34.7	30.3	19.9	13.0	13.0
82.5°	51.1	48.5	62.4	23.4	17.3	17.3	22.5	18.2	17.3	10.4	10.4
85°	31.2	40.7	30.3	10.4	8.7	6.9	7.8	7.8	10.4	6.9	6.9
87.5°	4.3	4.3	4.3	4.3	4.3	3.5	2.6	2.6	2.6	3.5	3.5
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)