

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: P265803

Luminaire Tested: **ARCH-M-AF48-90-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265803
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-90-D-U-T4W-7027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 600mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10635.3 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 92
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

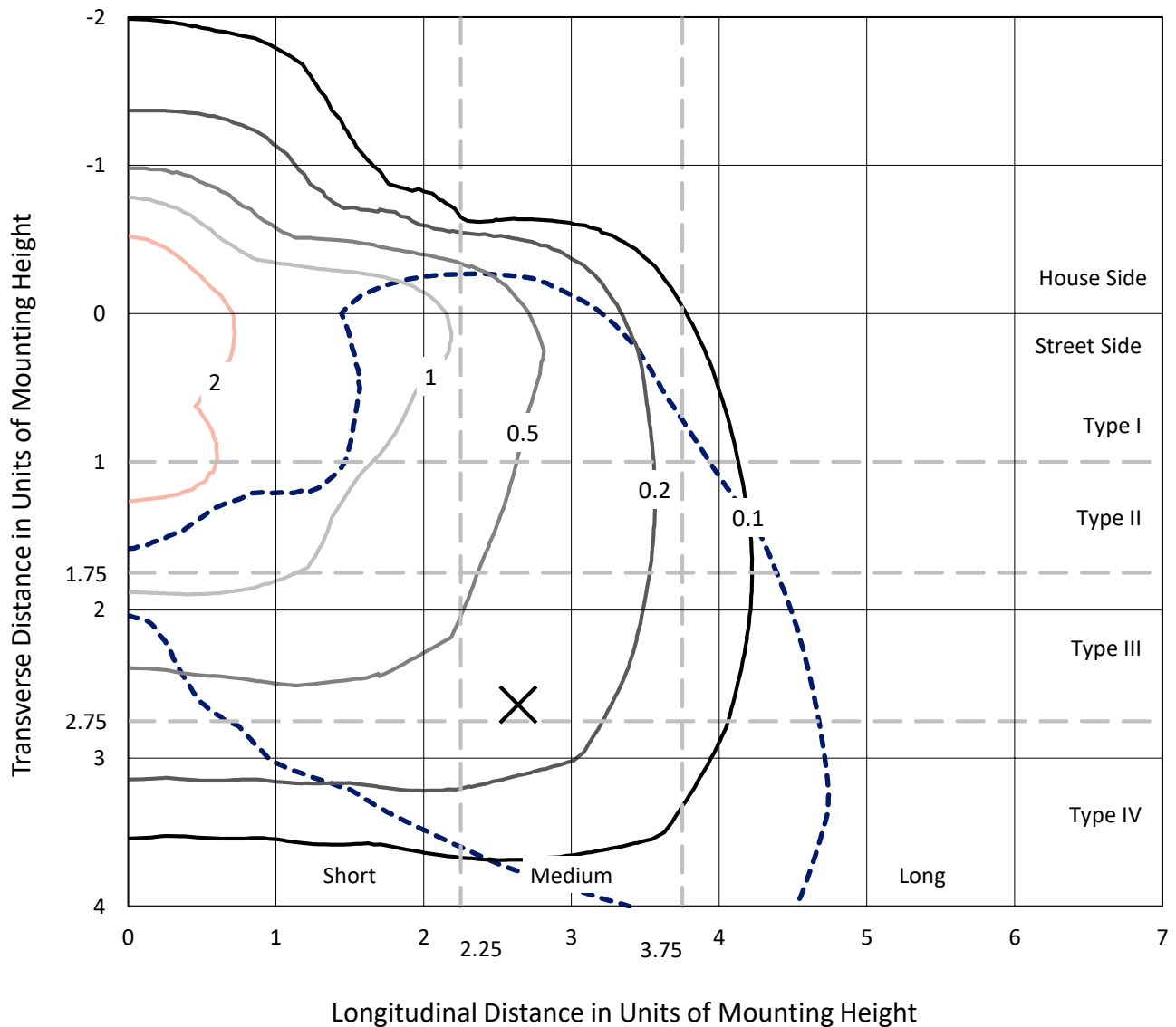


REPORT NUMBER: P265803

CATALOG NUMBER: ARCH-M-AF48-90-D-U-T4W-7027

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

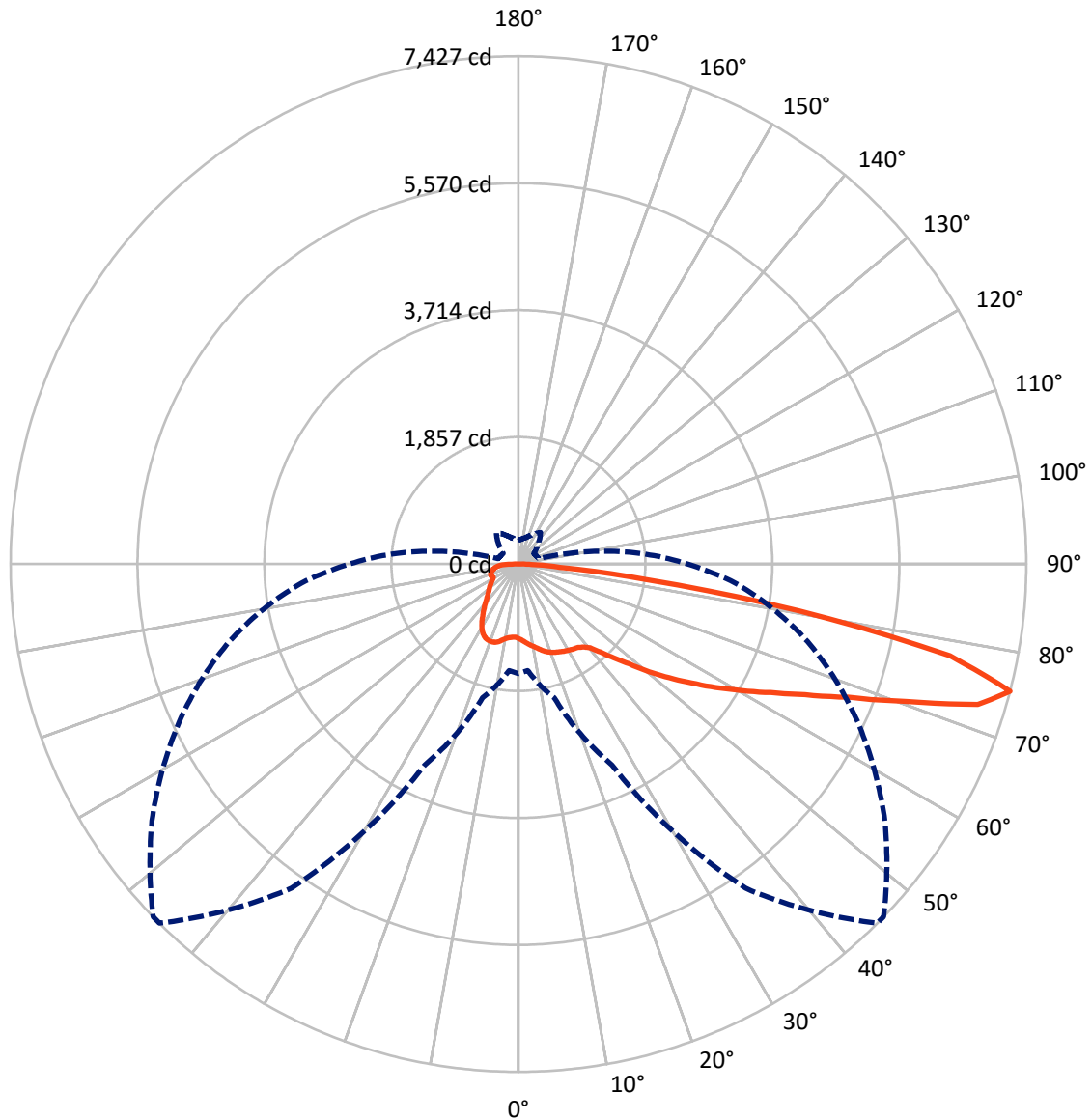


Based on 20 foot mounting height. Maximum calculated value = 3.2 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P265803

CATALOG NUMBER: ARCH-M-AF48-90-D-U-T4W-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



REPORT NUMBER: P265803

CATALOG NUMBER: ARCH-M-AF48-90-D-U-T4W-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2463.8	0.0	2463.8
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	8171.6	0.0	8171.6
	% Fixture	76.8	0.0	76.8
Total	Lumens	10635.3	0.0	10635.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.0	1.0
10°-20°	350.1	3.3
20°-30°	600.8	5.6
30°-40°	840.3	7.9
40°-50°	1232.7	11.6
50°-60°	1920.2	18.1
60°-70°	2763.0	26.0
70°-80°	2406.8	22.6
80°-90°	413.4	3.9
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°	10635.3	100.0
0°-180°	10635.3	100.0



REPORT NUMBER: P265803

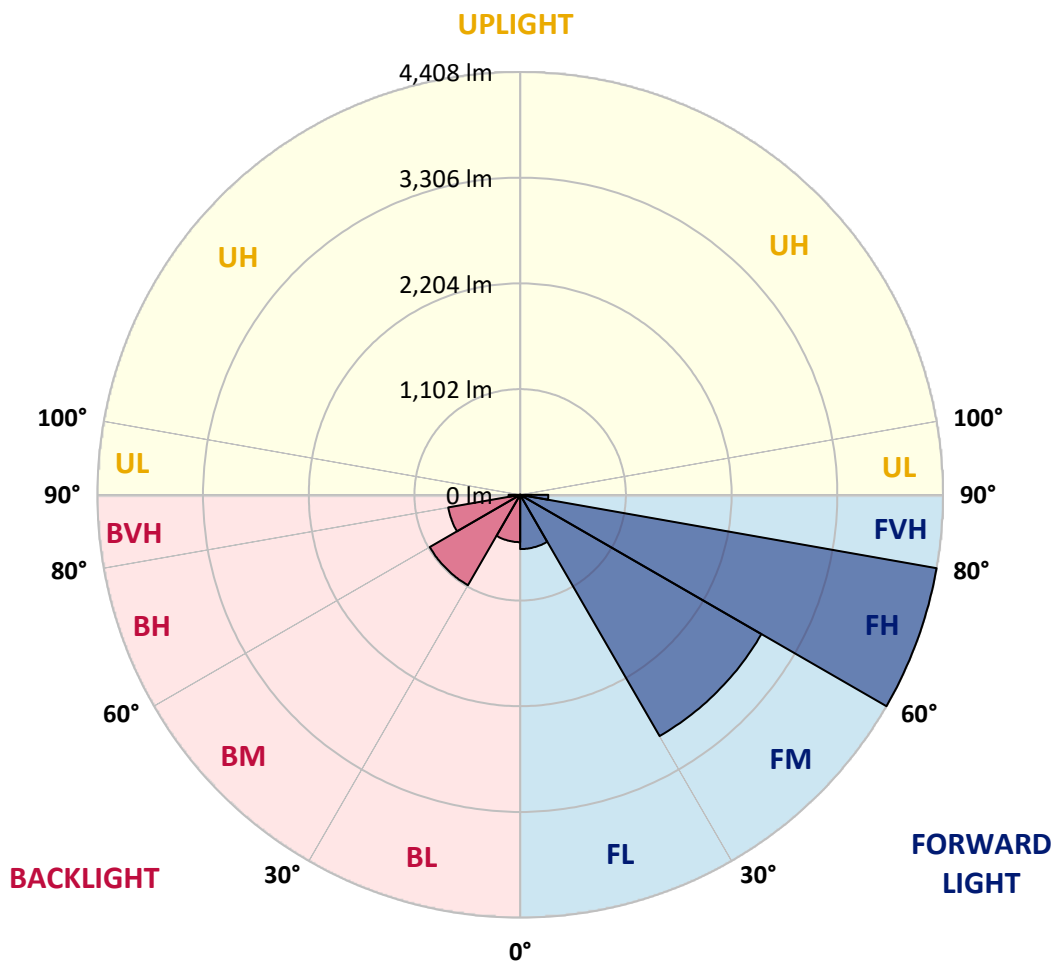
CATALOG NUMBER: ARCH-M-AF48-90-D-U-T4W-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	565.5	5.3			
FM	(30°-60°)	2904.3	27.3			
FH	(60°-80°)	4408.4	41.5			G2/5000
FVH	(80°-90°)	293.3	2.8			G3/500
BL	(0°-30°)	493.5	4.6	B1/500		
BM	(30°-60°)	1088.9	10.2	B2/2500		
BH	(60°-80°)	761.4	7.2	B2/1000		G2/1000
BVH	(80°-90°)	120.1	1.1			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Medium





REPORT NUMBER: P265803

CATALOG NUMBER: ARCH-M-AF48-90-D-U-T4W-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3
2.5°	1144.0	1135.7	1135.7	1129.6	1129.6	1119.3	1115.1	1113.0	1102.7	1096.6	1090.3
5°	1210.2	1200.0	1197.9	1183.3	1177.1	1154.4	1152.3	1137.9	1119.3	1100.7	1086.1
7.5°	1270.3	1264.0	1253.8	1239.2	1220.5	1191.6	1189.5	1166.8	1135.7	1110.9	1090.3
10°	1313.7	1309.5	1295.0	1276.5	1255.8	1226.8	1224.7	1200.0	1162.6	1133.8	1104.7
12.5°	1365.5	1359.2	1340.6	1315.7	1293.0	1266.2	1264.0	1243.3	1202.0	1164.7	1127.6
15°	1415.1	1406.7	1384.1	1359.2	1334.4	1311.6	1311.6	1288.9	1245.4	1202.0	1158.5
17.5°	1440.0	1435.9	1413.0	1386.2	1365.5	1348.8	1346.7	1326.1	1282.7	1237.1	1189.5
20°	1448.2	1450.3	1429.6	1400.5	1386.2	1377.8	1375.8	1361.3	1313.7	1270.3	1224.7
22.5°	1446.1	1452.3	1435.9	1404.7	1400.5	1400.5	1400.5	1384.1	1346.7	1303.4	1257.8
25°	1454.4	1462.7	1450.3	1413.0	1413.0	1421.3	1421.3	1413.0	1379.8	1342.6	1297.2
27.5°	1483.3	1489.6	1479.1	1427.4	1429.6	1442.0	1440.0	1442.0	1421.3	1386.2	1340.6
30°	1518.6	1526.8	1514.5	1450.3	1448.2	1460.6	1460.6	1471.0	1456.4	1419.2	1382.0
32.5°	1613.6	1611.6	1572.4	1475.0	1468.9	1481.2	1481.2	1491.6	1483.3	1454.4	1419.2
35°	1897.1	1866.0	1779.3	1555.8	1493.7	1499.9	1499.9	1518.6	1522.6	1499.9	1468.9
37.5°	2186.7	2176.5	2110.2	1770.9	1584.7	1539.2	1537.1	1563.9	1582.6	1563.9	1543.4
40°	2478.5	2470.2	2455.6	2058.5	1775.1	1609.6	1603.4	1626.1	1659.2	1646.9	1634.3
42.5°	2749.4	2745.3	2759.9	2341.9	2017.1	1760.6	1742.0	1715.0	1762.7	1758.5	1758.5
45°	2962.6	2972.9	2981.1	2606.7	2279.9	1955.0	1932.3	1841.3	1905.3	1922.0	1934.4
47.5°	3082.5	3090.8	3119.9	2865.4	2542.7	2180.5	2163.9	2015.1	2099.9	2149.6	2184.7
50°	3254.3	3231.6	3256.4	3117.7	2859.1	2474.3	2428.7	2248.7	2356.4	2443.3	2526.0
52.5°	3419.8	3382.6	3403.1	3409.4	3219.0	2761.8	2714.3	2524.0	2658.4	2794.9	2941.9
55°	3568.7	3566.7	3587.3	3692.8	3566.7	3070.1	3016.4	2828.0	3022.5	3169.4	3417.7
57.5°	3688.7	3709.5	3800.4	4021.8	3968.1	3405.2	3345.3	3181.8	3411.6	3558.4	3970.1
60°	3829.5	3862.5	4013.5	4301.1	4334.2	3757.0	3694.9	3577.1	3810.8	3959.6	4609.4
62.5°	3876.9	3924.5	4234.9	4594.9	4716.9	4141.7	4085.9	4007.2	4230.7	4365.3	5246.6
65°	3560.4	3651.5	4357.0	4745.8	5128.7	4605.3	4557.6	4489.4	4648.6	4737.7	5678.9
67.5°	3473.6	3515.0	4119.1	4963.1	5515.6	5201.0	5153.4	5035.4	5039.8	5002.4	5819.6
70°	3351.4	3397.0	3874.8	5126.5	6069.9	6016.2	5958.2	5610.6	5397.6	5172.1	5542.5
72.5°	2855.1	2840.5	3339.1	4685.9	6336.9	7025.7	6957.5	6229.2	5662.3	5025.2	4677.7
75°	1603.4	1562.0	2025.4	3241.9	5786.5	7427.0	7425.0	6541.6	5476.2	4377.6	3184.0
77.5°	465.5	453.0	668.2	1359.2	3895.6	6452.6	6531.2	5900.2	4570.0	3144.6	1748.1
80°	219.2	223.4	287.5	449.0	1663.3	4164.5	4390.0	3885.3	2730.8	1450.3	722.0
82.5°	138.6	140.7	196.5	289.7	703.5	1890.9	2077.2	1748.1	1082.0	626.8	318.5
85°	86.9	86.9	130.3	190.4	420.0	604.1	655.9	595.8	463.4	341.4	173.8
87.5°	47.6	47.6	78.6	109.7	229.6	194.5	200.7	238.0	289.7	208.9	86.9
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: P265803

CATALOG NUMBER: ARCH-M-AF48-90-D-U-T4W-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3
2.5°	1088.1	1084.1	1077.8	1075.8	1073.7	1071.7	1073.7	1077.8	1073.7	1073.7	1075.8
5°	1082.0	1077.8	1069.6	1069.6	1071.7	1073.7	1084.1	1090.3	1092.3	1092.3	1092.3
7.5°	1082.0	1075.8	1069.6	1071.7	1075.8	1084.1	1100.7	1110.9	1119.3	1121.4	1121.4
10°	1092.3	1084.1	1079.9	1084.1	1096.6	1102.7	1119.3	1135.7	1146.1	1150.3	1150.3
12.5°	1110.9	1102.7	1102.7	1110.9	1127.6	1135.7	1150.3	1162.6	1175.2	1181.4	1181.4
15°	1141.9	1131.7	1133.8	1148.3	1166.8	1175.2	1185.5	1189.5	1200.0	1208.2	1208.2
17.5°	1171.0	1160.6	1164.7	1181.4	1193.7	1197.9	1204.1	1202.0	1206.2	1212.4	1214.4
20°	1204.1	1193.7	1195.7	1206.2	1208.2	1204.1	1204.1	1197.9	1195.7	1206.2	1210.2
22.5°	1237.1	1226.8	1224.7	1218.6	1208.2	1197.9	1191.6	1185.5	1181.4	1191.6	1195.7
25°	1276.5	1261.9	1251.7	1224.7	1197.9	1179.3	1171.0	1166.8	1164.7	1175.2	1179.3
27.5°	1319.9	1305.4	1274.3	1216.5	1173.0	1141.9	1135.7	1135.7	1139.9	1146.1	1150.3
30°	1361.3	1346.7	1291.0	1197.9	1129.6	1084.1	1077.8	1084.1	1094.5	1100.7	1106.8
32.5°	1402.7	1388.2	1301.3	1168.9	1065.4	1007.4	1003.3	1013.7	1030.3	1034.4	1038.5
35°	1458.5	1444.0	1313.7	1127.6	984.7	922.6	918.5	924.7	939.3	945.5	951.7
37.5°	1537.1	1528.8	1332.4	1082.0	910.3	842.0	829.7	825.5	833.7	831.7	839.9
40°	1640.6	1646.9	1365.5	1022.0	837.8	767.5	740.7	728.3	719.9	703.5	711.6
42.5°	1791.6	1795.7	1402.7	953.7	775.7	697.2	662.1	639.2	622.7	595.8	600.0
45°	2013.0	1977.8	1446.1	881.2	719.9	641.3	600.0	573.1	550.3	527.6	529.6
47.5°	2306.8	2199.2	1493.7	821.3	664.0	595.8	558.6	527.6	500.6	482.0	484.0
50°	2668.8	2474.3	1541.3	765.4	608.2	560.6	527.6	494.4	467.6	449.0	446.8
52.5°	3146.8	2805.3	1572.4	703.5	552.4	529.6	500.6	469.6	436.5	413.8	411.8
55°	3643.2	3190.2	1599.3	629.0	498.6	494.4	480.0	444.8	405.5	376.5	372.3
57.5°	4189.3	3601.8	1620.0	556.5	457.1	465.5	461.4	420.0	376.5	349.6	347.6
60°	4685.9	4028.0	1553.7	492.5	420.0	436.5	440.7	405.5	382.8	389.0	391.0
62.5°	5186.5	4357.0	1301.3	444.8	395.2	417.9	453.0	450.9	440.7	450.9	453.0
65°	5366.6	4425.2	922.6	405.5	370.3	426.2	492.5	488.3	440.7	422.1	417.9
67.5°	5265.1	4222.5	620.6	374.5	351.6	436.5	533.8	488.3	424.1	399.2	391.0
70°	4783.1	3724.0	455.1	343.4	335.2	434.5	556.5	486.2	415.8	389.0	378.5
72.5°	3814.9	2873.6	366.1	314.4	310.4	424.1	568.9	482.0	407.6	378.5	366.1
75°	2470.2	1787.4	308.3	285.5	273.1	407.6	562.7	469.6	397.2	360.0	351.6
77.5°	1146.1	769.6	262.8	252.5	238.0	382.8	544.2	444.8	374.5	339.3	329.0
80°	533.8	364.2	221.3	219.2	213.1	362.0	519.3	415.8	347.6	318.5	302.0
82.5°	285.5	219.2	180.0	180.0	186.2	337.3	488.3	380.6	312.4	297.9	254.5
85°	151.1	126.2	130.3	140.7	159.3	297.9	446.8	343.4	273.1	227.6	221.3
87.5°	76.5	80.7	80.7	95.2	122.1	242.1	368.2	283.4	231.8	186.2	182.0
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)