

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: P265812

Luminaire Tested: **ARCH-M-AF48-100-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265812
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-AF48-100-D-U-T4W-7027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 660mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11509.9 lumens
Efficiency: N/A
Efficacy: 114.0 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): 101
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

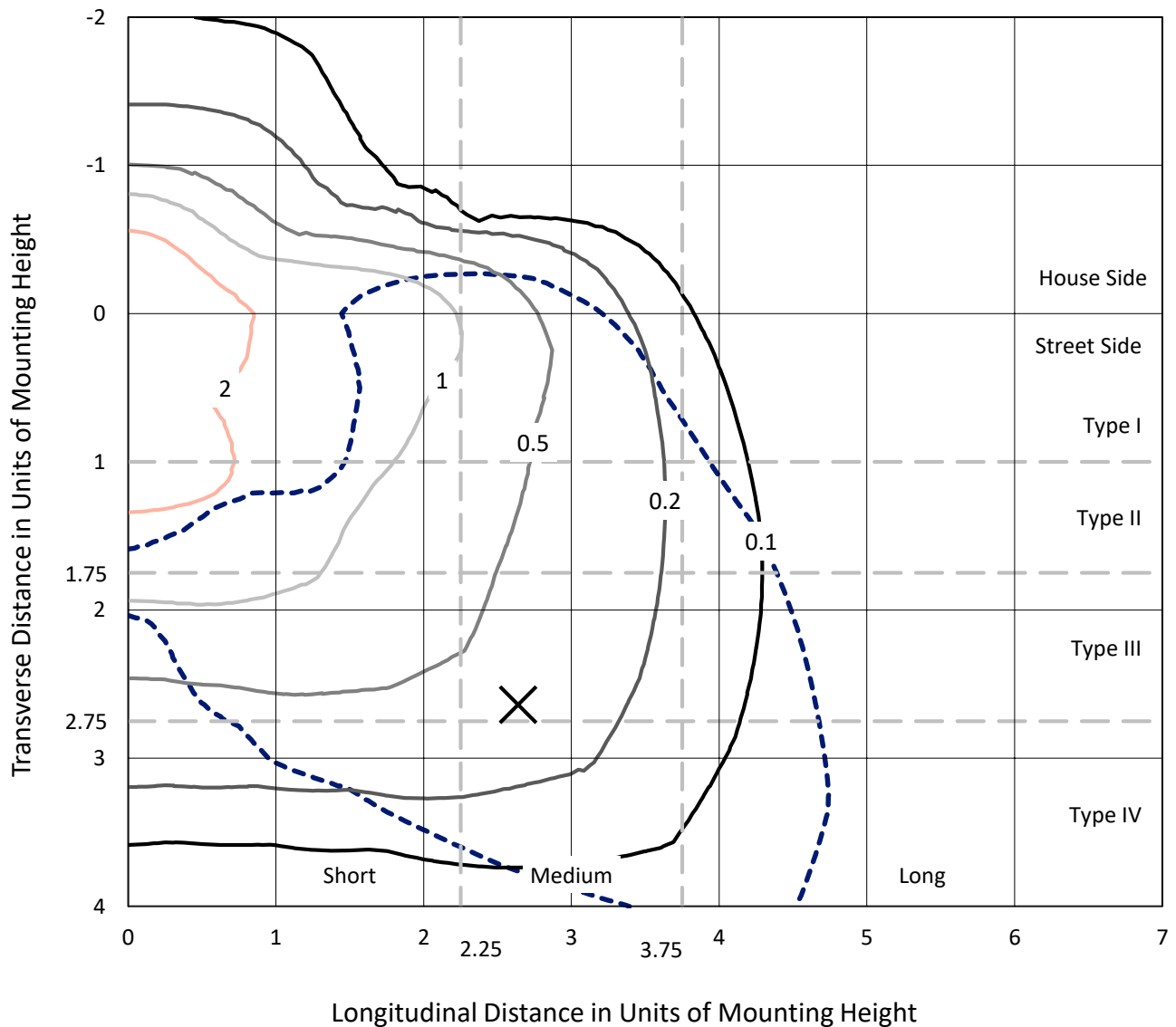


REPORT NUMBER: P265812

CATALOG NUMBER: ARCH-M-AF48-100-D-U-T4W-7027

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

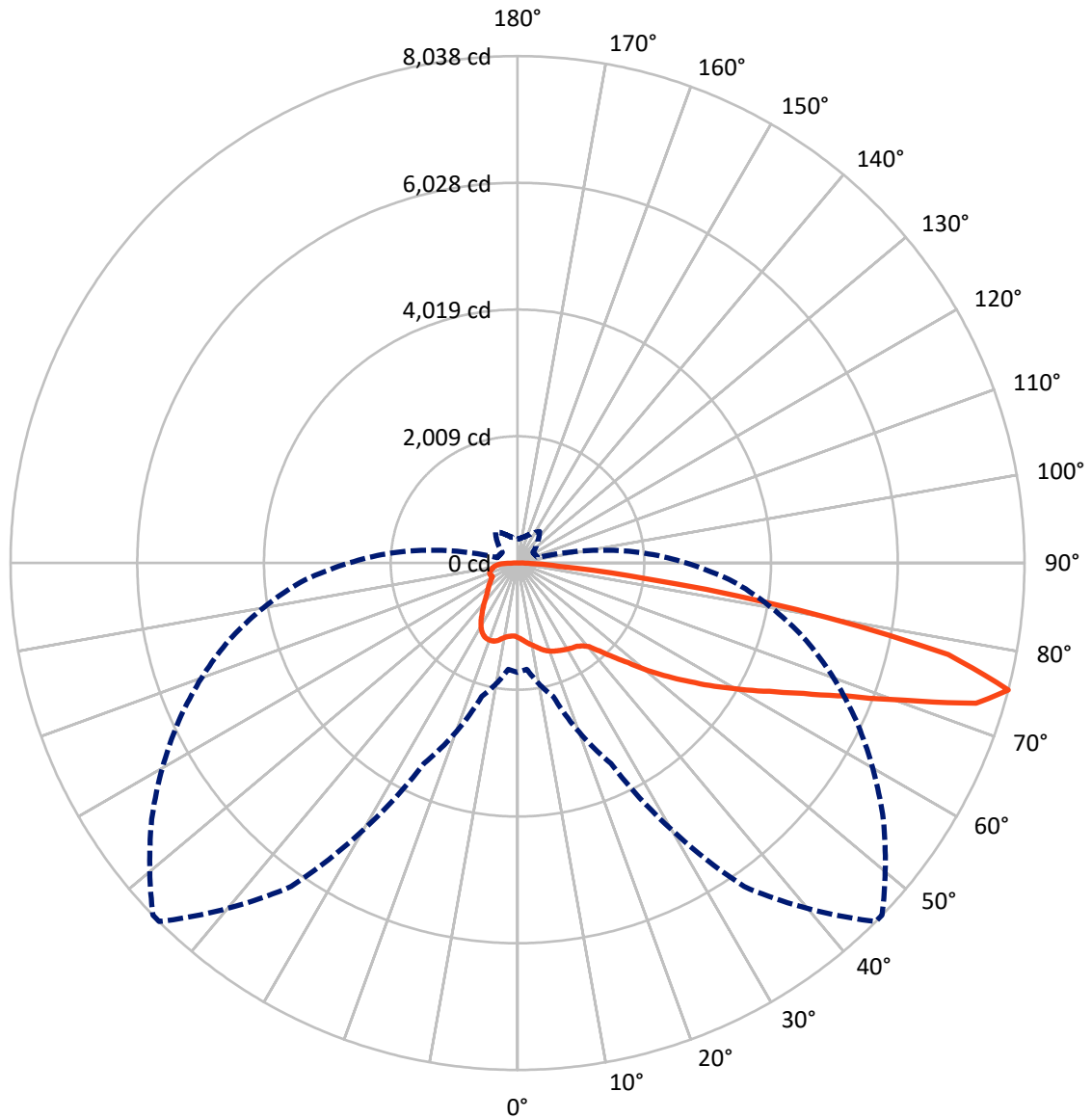


Based on 20 foot mounting height. Maximum calculated value = 3.4 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P265812

CATALOG NUMBER: ARCH-M-AF48-100-D-U-T4W-7027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P265812

CATALOG NUMBER: ARCH-M-AF48-100-D-U-T4W-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2666.4	0.0	2666.4
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	8843.5	0.0	8843.5
	% Fixture	76.8	0.0	76.8
Total	Lumens	11509.9	0.0	11509.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.9	1.0
10°-20°	378.9	3.3
20°-30°	650.2	5.6
30°-40°	909.4	7.9
40°-50°	1334.0	11.6
50°-60°	2078.1	18.1
60°-70°	2990.2	26.0
70°-80°	2604.8	22.6
80°-90°	447.3	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°	11509.9	100.0
0°-180°	11509.9	100.0

Coefficient of Utilization



REPORT NUMBER: P265812

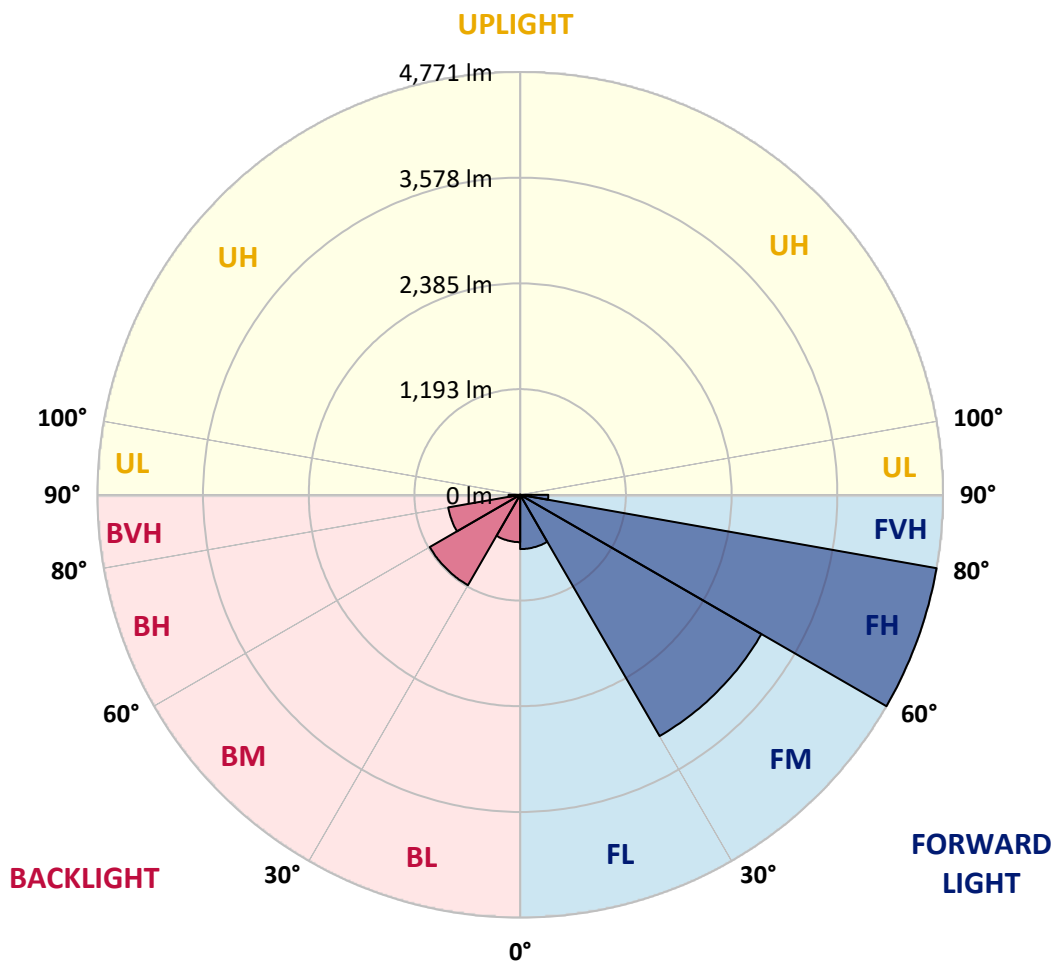
CATALOG NUMBER: ARCH-M-AF48-100-D-U-T4W-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	612.1	5.3			
FM (30°-60°)	3143.1	27.3			
FH (60°-80°)	4770.9	41.5			G2/5000
FVH (80°-90°)	317.4	2.8			G3/500
BL (0°-30°)	534.0	4.6	B2/1000		
BM (30°-60°)	1178.4	10.2	B2/2500		
BH (60°-80°)	824.0	7.2	B2/1000		G2/1000
BVH (80°-90°)	130.0	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: P265812

CATALOG NUMBER: ARCH-M-AF48-100-D-U-T4W-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1180.0	1180.0	1180.0	1180.0	1180.0	1180.0	1180.0	1180.0	1180.0	1180.0	1180.0
2.5°	1238.1	1229.2	1229.2	1222.5	1222.5	1211.3	1206.9	1204.5	1193.4	1186.7	1180.0
5°	1309.8	1298.6	1296.3	1280.7	1273.9	1249.4	1247.0	1231.4	1211.3	1191.2	1175.4
7.5°	1374.6	1367.9	1356.8	1341.1	1321.0	1289.6	1287.5	1262.7	1229.2	1202.3	1180.0
10°	1421.7	1417.3	1401.5	1381.5	1359.0	1327.7	1325.4	1298.6	1258.3	1226.9	1195.6
12.5°	1477.7	1471.0	1450.9	1424.0	1399.3	1370.3	1367.9	1345.7	1300.8	1260.5	1220.2
15°	1531.4	1522.4	1497.8	1471.0	1444.1	1419.5	1419.5	1394.9	1347.8	1300.8	1253.9
17.5°	1558.3	1553.8	1529.2	1500.1	1477.7	1459.7	1457.6	1435.1	1388.2	1338.8	1287.5
20°	1567.3	1569.5	1547.2	1515.8	1500.1	1491.1	1488.9	1473.2	1421.7	1374.6	1325.4
22.5°	1564.9	1571.8	1553.8	1520.2	1515.8	1515.8	1515.8	1497.8	1457.6	1410.5	1361.3
25°	1574.0	1583.0	1569.5	1529.2	1529.2	1538.2	1538.2	1529.2	1493.3	1453.1	1403.8
27.5°	1605.4	1612.1	1600.8	1544.8	1547.2	1560.5	1558.3	1560.5	1538.2	1500.1	1450.9
30°	1643.4	1652.3	1638.9	1569.5	1567.3	1580.7	1580.7	1591.8	1576.3	1535.9	1495.6
32.5°	1746.3	1744.1	1701.6	1596.4	1589.6	1603.0	1603.0	1614.3	1605.4	1574.0	1535.9
35°	2053.0	2019.5	1925.4	1683.8	1616.5	1623.2	1623.2	1643.4	1647.9	1623.2	1589.6
37.5°	2366.6	2355.4	2283.8	1916.5	1715.0	1665.7	1663.5	1692.6	1712.8	1692.6	1670.3
40°	2682.2	2673.3	2657.6	2227.7	1921.0	1742.0	1735.2	1759.8	1795.6	1782.1	1768.8
42.5°	2975.5	2971.1	2986.8	2534.5	2183.1	1905.3	1885.3	1856.1	1907.6	1903.1	1903.1
45°	3206.2	3217.4	3226.4	2821.0	2467.4	2115.8	2091.2	1992.7	2062.1	2079.9	2093.4
47.5°	3336.0	3345.0	3376.3	3100.9	2751.7	2359.8	2341.9	2180.7	2272.5	2326.3	2364.2
50°	3521.9	3497.2	3524.1	3374.0	3094.2	2677.8	2628.5	2433.7	2550.2	2644.3	2733.7
52.5°	3700.9	3660.7	3683.1	3689.8	3483.7	2989.0	2937.5	2731.4	2877.0	3024.9	3183.8
55°	3862.2	3859.9	3882.4	3996.5	3859.9	3322.7	3264.4	3060.6	3271.1	3430.1	3698.7
57.5°	3992.1	4014.4	4112.9	4352.5	4294.3	3685.2	3620.3	3443.6	3692.0	3850.9	4296.6
60°	4144.3	4180.2	4343.6	4654.7	4690.6	4065.9	3998.7	3871.2	4124.1	4285.4	4988.4
62.5°	4195.8	4247.2	4583.2	4972.7	5104.8	4482.4	4421.8	4336.8	4578.7	4724.1	5677.9
65°	3853.2	3951.7	4715.3	5136.1	5550.4	4983.8	4932.4	4858.6	5030.9	5127.2	6145.8
67.5°	3759.1	3804.0	4457.7	5371.2	5969.0	5628.7	5577.1	5449.6	5454.1	5413.7	6298.1
70°	3627.0	3676.4	4193.6	5548.1	6569.0	6510.8	6448.2	6072.1	5841.4	5597.3	5998.2
72.5°	3089.7	3074.1	3613.6	5071.2	6857.9	7603.4	7529.6	6741.4	6128.0	5438.3	5062.3
75°	1735.2	1690.4	2192.0	3508.4	6262.4	8037.9	8035.6	7079.5	5926.5	4737.7	3445.7
77.5°	503.8	490.4	723.1	1471.0	4215.9	6983.2	7068.4	6385.4	4945.8	3403.1	1891.9
80°	237.3	241.9	311.3	485.9	1800.2	4506.9	4751.0	4204.7	2955.5	1569.5	781.3
82.5°	149.9	152.3	212.7	313.5	761.3	2046.3	2247.9	1891.9	1171.0	678.4	344.8
85°	94.1	94.1	141.0	206.0	454.5	653.7	709.8	644.9	501.6	369.5	188.0
87.5°	51.6	51.6	85.1	118.7	248.6	210.5	217.2	257.5	313.5	226.2	94.1
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: P265812

CATALOG NUMBER: ARCH-M-AF48-100-D-U-T4W-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1180.0	1180.0	1180.0	1180.0	1180.0	1180.0	1180.0	1180.0	1180.0	1180.0	1180.0
2.5°	1177.7	1173.1	1166.4	1164.3	1162.0	1159.8	1162.0	1166.4	1162.0	1162.0	1164.3
5°	1171.0	1166.4	1157.6	1157.6	1159.8	1162.0	1173.1	1180.0	1182.2	1182.2	1182.2
7.5°	1171.0	1164.3	1157.6	1159.8	1164.3	1173.1	1191.2	1202.3	1211.3	1213.5	1213.5
10°	1182.2	1173.1	1168.8	1173.1	1186.7	1193.4	1211.3	1229.2	1240.4	1244.8	1244.8
12.5°	1202.3	1193.4	1193.4	1202.3	1220.2	1229.2	1244.8	1258.3	1271.7	1278.5	1278.5
15°	1235.9	1224.7	1226.9	1242.6	1262.7	1271.7	1282.9	1287.5	1298.6	1307.6	1307.6
17.5°	1267.2	1256.0	1260.5	1278.5	1291.9	1296.3	1303.0	1300.8	1305.2	1312.1	1314.3
20°	1303.0	1291.9	1294.1	1305.2	1307.6	1303.0	1303.0	1296.3	1294.1	1305.2	1309.8
22.5°	1338.8	1327.7	1325.4	1318.7	1307.6	1296.3	1289.6	1282.9	1278.5	1289.6	1294.1
25°	1381.5	1365.8	1354.6	1325.4	1296.3	1276.2	1267.2	1262.7	1260.5	1271.7	1276.2
27.5°	1428.5	1412.8	1379.2	1316.5	1269.5	1235.9	1229.2	1229.2	1233.6	1240.4	1244.8
30°	1473.2	1457.6	1397.1	1296.3	1222.5	1173.1	1166.4	1173.1	1184.3	1191.2	1197.8
32.5°	1518.0	1502.3	1408.4	1265.1	1153.1	1090.4	1086.0	1097.1	1114.9	1119.5	1124.0
35°	1578.4	1562.8	1421.7	1220.2	1065.7	998.6	994.1	1000.8	1016.5	1023.2	1029.8
37.5°	1663.5	1654.6	1441.9	1171.0	985.1	911.2	897.9	893.4	902.3	900.0	909.1
40°	1775.5	1782.1	1477.7	1106.1	906.7	830.7	801.6	788.2	779.2	761.3	770.1
42.5°	1938.9	1943.5	1518.0	1032.2	839.6	754.5	716.5	691.9	673.9	644.9	649.3
45°	2178.5	2140.4	1564.9	953.8	779.2	694.1	649.3	620.2	595.5	571.0	573.2
47.5°	2496.4	2380.0	1616.5	888.9	718.7	644.9	604.5	571.0	541.8	521.6	523.9
50°	2888.2	2677.8	1668.1	828.3	658.3	606.7	571.0	535.1	505.9	485.9	483.6
52.5°	3405.5	3036.0	1701.6	761.3	597.8	573.2	541.8	508.3	472.4	447.7	445.6
55°	3942.8	3452.5	1730.8	680.6	539.6	535.1	519.4	481.4	438.8	407.6	403.0
57.5°	4533.8	3897.9	1753.1	602.3	494.7	503.8	499.3	454.5	407.6	378.4	376.1
60°	5071.2	4359.3	1681.4	532.9	454.5	472.4	476.9	438.8	414.2	420.9	423.1
62.5°	5613.0	4715.3	1408.4	481.4	427.7	452.2	490.4	488.0	476.9	488.0	490.4
65°	5807.8	4789.1	998.6	438.8	400.7	461.2	532.9	528.5	476.9	456.8	452.2
67.5°	5698.0	4569.7	671.8	405.2	380.6	472.4	577.6	528.5	458.9	432.2	423.1
70°	5176.5	4030.1	492.6	371.7	362.7	470.2	602.3	526.1	450.1	420.9	409.7
72.5°	4128.6	3109.9	396.3	340.3	335.8	458.9	615.7	521.6	441.1	409.7	396.3
75°	2673.3	1934.4	333.6	308.9	295.5	441.1	609.1	508.3	429.8	389.5	380.6
77.5°	1240.4	832.9	284.4	273.2	257.5	414.2	588.8	481.4	405.2	367.1	356.0
80°	577.6	394.0	239.6	237.3	230.7	391.8	562.0	450.1	376.1	344.8	327.0
82.5°	308.9	237.3	194.8	194.8	201.5	364.9	528.5	412.0	338.1	322.4	275.4
85°	163.4	136.6	141.0	152.3	172.5	322.4	483.6	371.7	295.5	246.2	239.6
87.5°	82.9	87.3	87.3	102.9	132.1	261.9	398.6	306.7	250.7	201.5	197.0
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)