

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: P265792

Luminaire Tested: **ARCH-M-AF48-80-D-U-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265792
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-80-D-U-T3-7027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 535mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9662.7 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 83
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

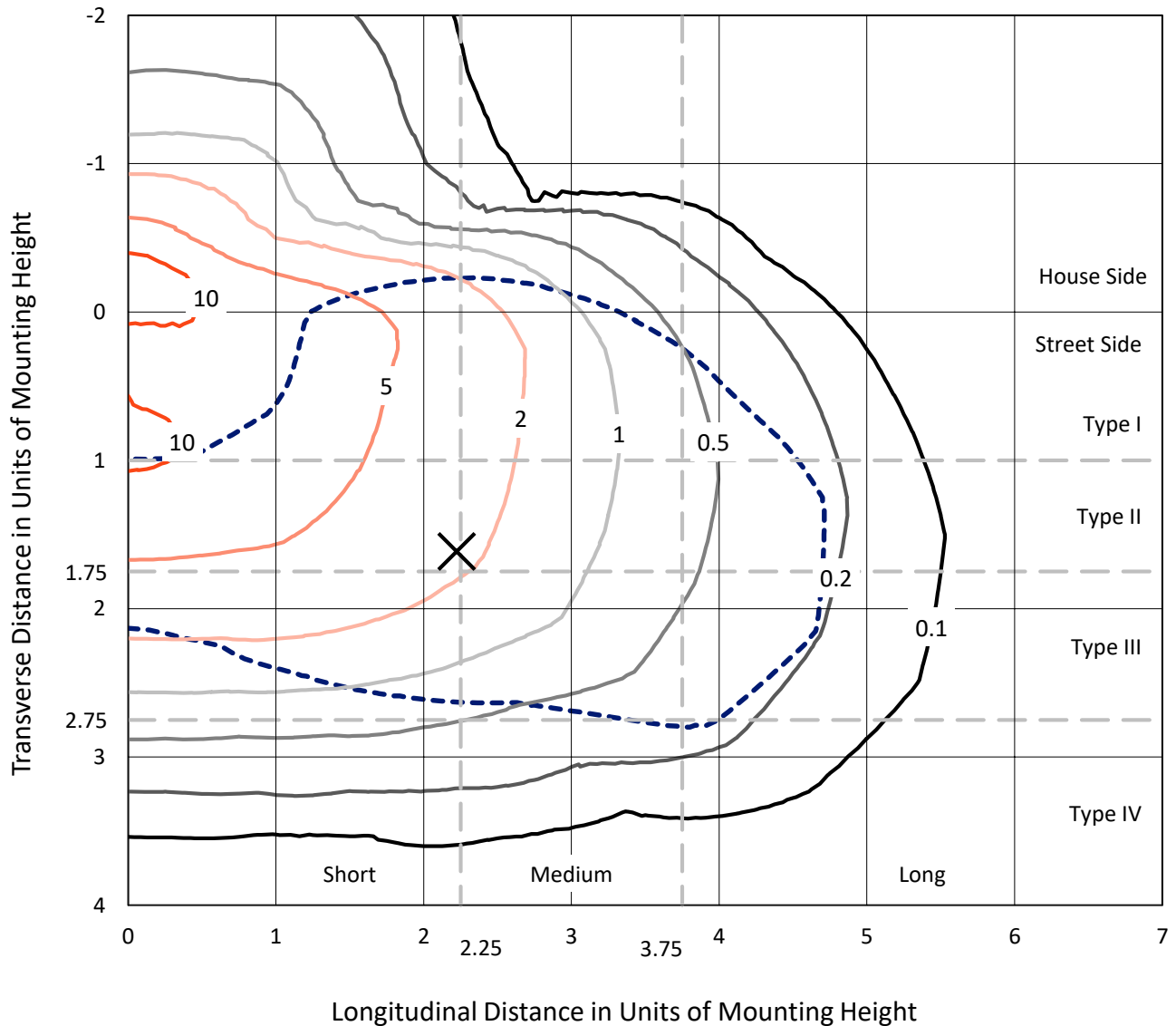


REPORT NUMBER: P265792

CATALOG NUMBER: ARCH-M-AF48-80-D-U-T3-7027

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

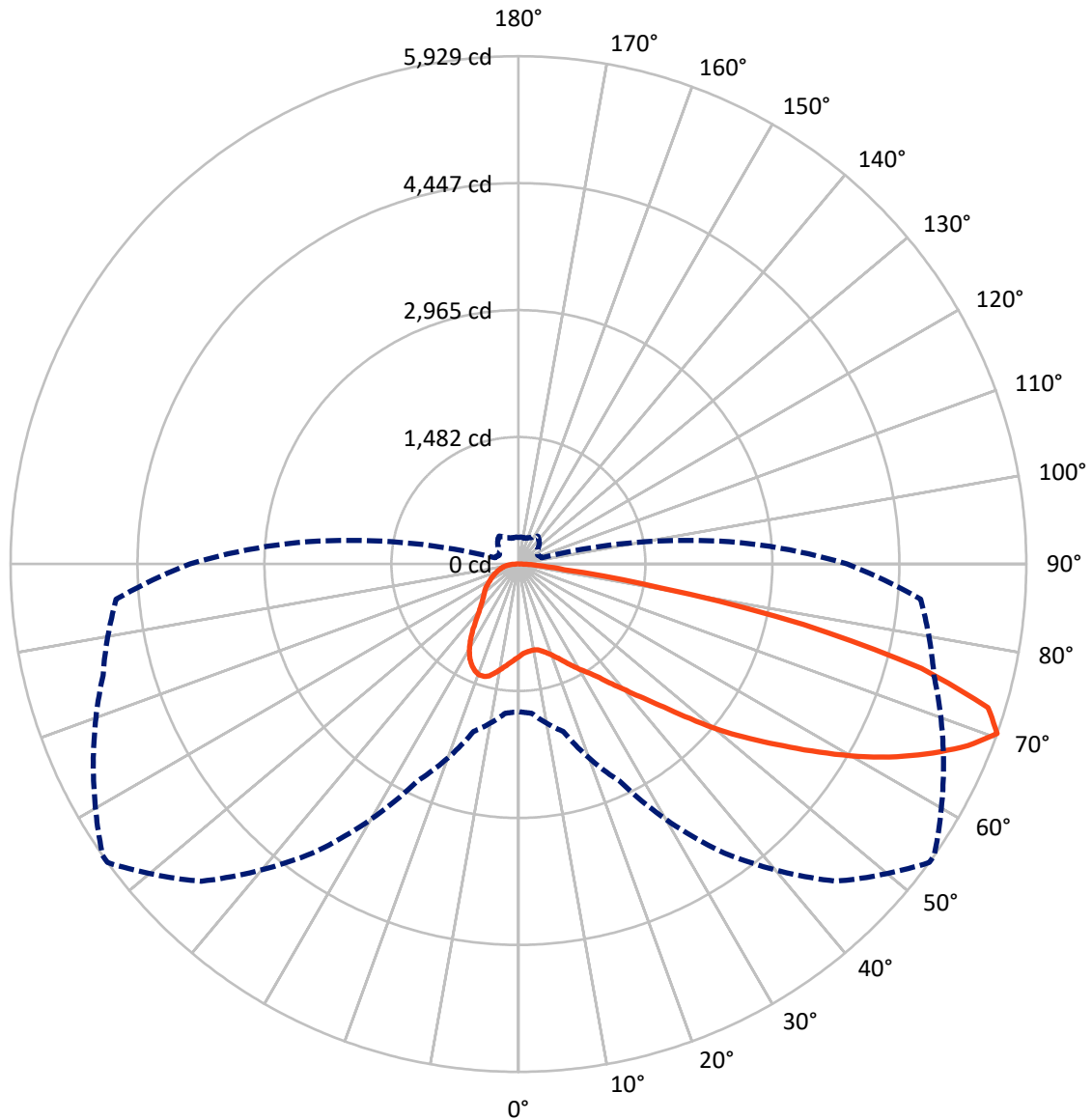


Based on 10 foot mounting height. Maximum calculated value = 12.6 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P265792

CATALOG NUMBER: ARCH-M-AF48-80-D-U-T3-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P265792

CATALOG NUMBER: ARCH-M-AF48-80-D-U-T3-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2191.5	0.0	2191.5
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	7471.2	0.0	7471.2
	% Fixture	77.3	0.0	77.3
Total	Lumens	9662.7	0.0	9662.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.1	1.1
10°-20°	339.0	3.5
20°-30°	589.0	6.1
30°-40°	860.7	8.9
40°-50°	1350.8	14.0
50°-60°	2077.2	21.5
60°-70°	2537.8	26.3
70°-80°	1573.5	16.3
80°-90°	228.6	2.4
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°	9662.7	100.0
0°-180°	9662.7	100.0

Coefficient of Utilization



REPORT NUMBER: P265792

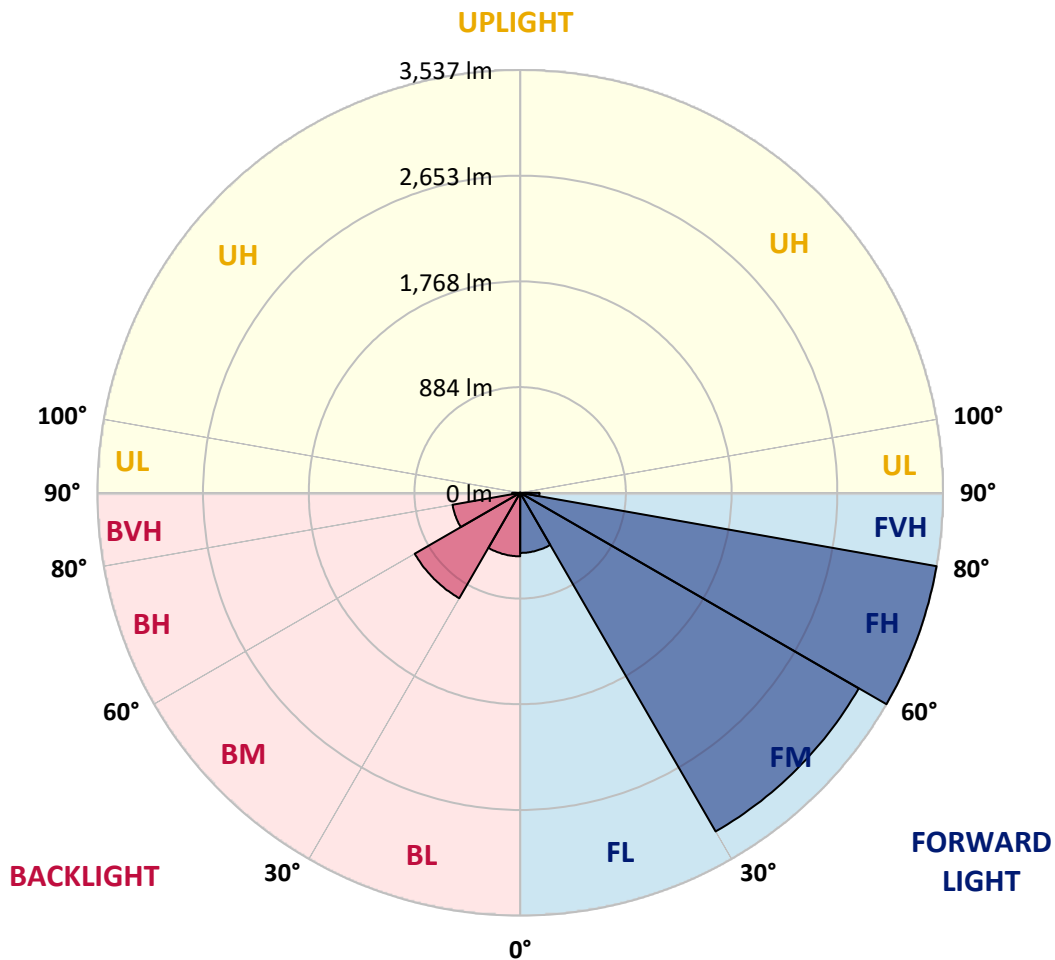
CATALOG NUMBER: ARCH-M-AF48-80-D-U-T3-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	502.7	5.2			
FM	(30°-60°)	3270.4	33.8			
FH	(60°-80°)	3536.7	36.6			G2/5000
FVH	(80°-90°)	161.4	1.7			G2/225
BL	(0°-30°)	531.3	5.5	B2/1000		
BM	(30°-60°)	1018.3	10.5	B2/2500		
BH	(60°-80°)	574.6	5.9	B2/1000		G2/1000
BVH	(80°-90°)	67.2	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





REPORT NUMBER: P265792

CATALOG NUMBER: ARCH-M-AF48-80-D-U-T3-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	1081.1	1081.1	1081.1	1081.1	1081.1	1081.1	1081.1	1081.1	1081.1	1081.1	1081.1
2.5°	1038.6	1035.0	1035.0	1040.3	1042.2	1047.5	1047.5	1049.2	1054.5	1063.4	1074.0
5°	1006.7	1004.9	1006.7	1013.8	1017.4	1028.0	1031.6	1033.3	1043.9	1058.1	1074.0
7.5°	974.9	973.1	976.6	987.2	997.8	1013.8	1022.7	1024.4	1040.3	1059.8	1081.1
10°	964.3	962.5	967.8	976.6	987.2	1004.9	1019.1	1021.0	1043.9	1066.8	1097.0
12.5°	978.4	976.6	981.9	990.8	1001.4	1013.8	1029.7	1031.6	1061.5	1091.7	1123.5
15°	1013.8	1013.8	1015.7	1021.0	1031.6	1042.2	1056.2	1058.1	1090.0	1125.2	1157.1
17.5°	1068.7	1065.1	1065.1	1063.4	1070.4	1075.7	1093.4	1095.3	1128.8	1160.7	1192.5
20°	1135.8	1134.1	1127.1	1118.2	1116.5	1119.9	1137.7	1139.4	1173.0	1199.5	1229.7
22.5°	1217.4	1219.1	1203.1	1183.6	1174.9	1180.2	1196.1	1197.8	1222.7	1245.6	1272.1
25°	1325.2	1319.9	1297.0	1268.5	1250.9	1250.9	1266.8	1266.8	1289.8	1304.0	1321.6
27.5°	1427.9	1417.3	1396.0	1355.4	1326.9	1332.2	1348.3	1348.3	1369.5	1374.8	1383.6
30°	1539.3	1528.6	1502.1	1450.9	1413.8	1410.2	1429.7	1427.9	1456.2	1454.4	1447.3
32.5°	1675.6	1670.3	1626.0	1560.5	1510.9	1498.6	1516.2	1518.0	1535.8	1530.4	1507.4
35°	1866.7	1864.9	1824.2	1709.1	1643.7	1620.7	1631.3	1631.3	1643.7	1629.5	1590.5
37.5°	2107.2	2110.7	2075.4	1905.6	1813.6	1774.6	1776.4	1774.6	1778.1	1762.2	1721.5
40°	2347.9	2356.8	2354.9	2149.7	2033.0	1965.8	1941.0	1937.5	1946.3	1939.3	1900.3
42.5°	2664.6	2685.8	2636.3	2450.5	2319.7	2206.3	2139.1	2130.3	2149.7	2158.5	2121.4
45°	2993.7	2986.7	2908.8	2774.3	2655.7	2510.7	2383.4	2369.1	2383.4	2409.9	2370.8
47.5°	3165.4	3160.0	3140.6	3073.3	3055.7	2889.3	2696.4	2684.0	2657.5	2694.6	2648.7
50°	3448.5	3453.8	3374.2	3367.0	3441.3	3349.3	3050.4	3022.0	2974.3	3004.3	2965.3
52.5°	3653.6	3630.7	3581.2	3643.0	3874.7	3825.3	3382.9	3370.6	3326.3	3319.2	3301.6
55°	3736.8	3736.8	3745.7	3889.0	4219.9	4154.4	3743.9	3756.4	3696.2	3646.6	3669.5
57.5°	3761.7	3772.3	3848.2	4085.4	4625.1	4410.9	4141.9	4159.7	4072.9	3973.9	4046.4
60°	3639.6	3671.4	3853.5	4196.8	4853.3	4683.5	4561.4	4566.7	4441.0	4296.0	4423.3
62.5°	3326.3	3365.3	3690.9	4242.9	4816.2	4963.0	4957.7	4970.1	4798.4	4617.9	4777.1
65°	2942.4	2981.4	3328.1	4113.7	4787.7	5162.9	5320.4	5354.0	5132.8	4890.5	4998.3
67.5°	2378.0	2429.2	2758.3	3678.4	4649.7	5327.5	5660.1	5695.4	5391.2	5031.9	4978.9
70°	1723.3	1748.1	2024.2	2795.5	4087.2	5237.2	5929.1	5927.2	5476.1	5021.3	4713.4
72.5°	829.9	849.3	1088.1	1735.7	2922.9	4444.5	5734.4	5767.9	5359.3	4867.5	4106.6
75°	341.4	360.9	440.6	732.5	1534.0	2937.1	4860.3	4940.0	4867.5	4368.5	3213.1
77.5°	212.3	219.4	258.4	378.6	700.7	1371.3	3402.4	3510.3	3857.1	3499.7	2121.4
80°	159.2	164.6	192.9	265.4	442.3	506.0	1689.7	1826.0	2337.3	2008.3	960.7
82.5°	132.7	134.4	153.9	192.9	300.8	290.2	541.4	603.3	1090.0	766.2	330.8
85°	123.8	127.4	138.0	138.0	191.1	182.3	224.7	235.4	316.7	261.9	115.1
87.5°	63.7	60.1	122.1	107.9	99.2	88.5	95.5	102.6	118.5	125.7	51.4
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: P265792

CATALOG NUMBER: ARCH-M-AF48-80-D-U-T3-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1081.1	1081.1	1081.1	1081.1	1081.1	1081.1	1081.1	1081.1	1081.1	1081.1	1081.1
2.5°	1077.5	1082.8	1091.7	1100.6	1111.2	1123.5	1130.5	1139.4	1146.5	1143.1	1141.1
5°	1082.8	1091.7	1111.2	1128.8	1150.1	1174.9	1190.8	1208.5	1222.7	1226.1	1220.8
7.5°	1091.7	1107.6	1134.1	1166.0	1194.2	1226.1	1250.9	1275.8	1293.4	1297.0	1297.0
10°	1112.9	1130.5	1166.0	1208.5	1242.0	1275.8	1304.0	1323.5	1339.5	1346.5	1346.5
12.5°	1143.1	1164.3	1206.7	1257.9	1295.1	1326.9	1343.0	1351.8	1358.9	1366.0	1367.7
15°	1178.3	1201.4	1252.6	1307.6	1346.5	1362.4	1362.4	1360.7	1360.7	1364.2	1367.7
17.5°	1213.8	1238.6	1291.7	1350.1	1374.8	1366.0	1353.6	1348.3	1344.8	1343.0	1348.3
20°	1250.9	1275.8	1328.8	1383.6	1376.6	1339.5	1321.6	1309.3	1298.7	1293.4	1300.4
22.5°	1291.7	1314.6	1369.5	1406.7	1353.6	1297.0	1263.2	1243.9	1226.1	1215.5	1222.7
25°	1339.5	1362.4	1415.5	1413.8	1312.9	1233.3	1180.2	1148.4	1128.8	1118.2	1118.2
27.5°	1396.0	1415.5	1466.8	1396.0	1256.2	1148.4	1070.4	1040.3	1035.0	1026.3	1026.3
30°	1454.4	1470.3	1514.5	1355.4	1178.3	1036.9	951.9	937.7	939.4	930.6	932.4
32.5°	1514.5	1530.4	1542.8	1295.1	1077.5	911.2	854.6	844.0	842.3	835.2	828.1
35°	1599.5	1622.5	1546.4	1213.8	955.4	806.8	766.2	755.6	744.9	720.1	720.1
37.5°	1728.6	1753.4	1537.5	1112.9	829.9	725.4	688.3	674.1	656.4	631.7	622.9
40°	1905.6	1905.6	1518.0	999.6	729.0	660.0	624.6	606.9	587.4	562.7	557.4
42.5°	2114.3	2064.8	1488.0	884.7	654.7	615.7	583.9	564.5	541.4	513.1	509.6
45°	2358.5	2224.1	1445.6	782.1	599.8	589.2	569.7	536.1	497.2	467.1	461.8
47.5°	2595.7	2367.4	1404.9	709.5	553.7	578.6	562.7	506.0	452.9	410.4	405.1
50°	2855.7	2494.8	1357.1	649.4	518.4	571.5	553.7	461.8	403.3	373.3	369.8
52.5°	3115.9	2623.9	1305.7	585.6	488.3	557.4	532.5	430.0	401.6	360.9	355.5
55°	3390.1	2774.3	1245.6	514.9	452.9	529.0	504.3	428.2	413.9	360.9	348.5
57.5°	3657.2	2940.6	1148.4	445.9	413.9	486.5	493.7	417.5	387.4	357.3	343.2
60°	3952.7	3117.6	987.2	387.4	380.4	451.2	479.4	394.5	357.3	346.7	339.6
62.5°	4189.8	3276.7	771.5	346.7	352.0	422.8	461.8	380.4	344.9	336.1	334.3
65°	4292.5	3280.3	553.7	311.4	323.7	396.3	444.1	368.0	334.3	330.8	329.0
67.5°	4184.5	3100.0	389.2	277.8	293.7	371.5	421.0	355.5	323.7	325.5	322.0
70°	3835.9	2719.4	284.9	246.0	265.4	344.9	396.3	339.6	311.4	314.9	309.6
72.5°	3209.6	2119.6	228.2	219.4	242.5	316.7	371.5	322.0	291.9	293.7	283.1
75°	2370.8	1404.9	191.1	196.4	215.9	290.2	339.6	299.0	270.7	263.7	256.6
77.5°	1410.2	721.9	157.5	171.7	192.9	258.4	304.3	270.7	247.8	235.4	230.1
80°	582.1	291.9	129.1	145.0	168.2	230.1	269.0	237.2	221.2	208.8	201.7
82.5°	231.9	143.3	102.6	118.5	141.6	200.0	235.4	208.8	192.9	184.1	164.6
85°	88.5	70.7	69.0	83.2	106.2	153.9	194.7	175.2	162.8	139.7	134.4
87.5°	35.5	31.8	31.8	40.8	60.1	97.2	139.7	122.1	127.4	100.9	102.6
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)