

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: P265588

Luminaire Tested: **ARCH-L-AF72-100-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265588
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-100-D-U-T4W-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8818.6 lumens
Efficiency: N/A
Efficacy: 86.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 102
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

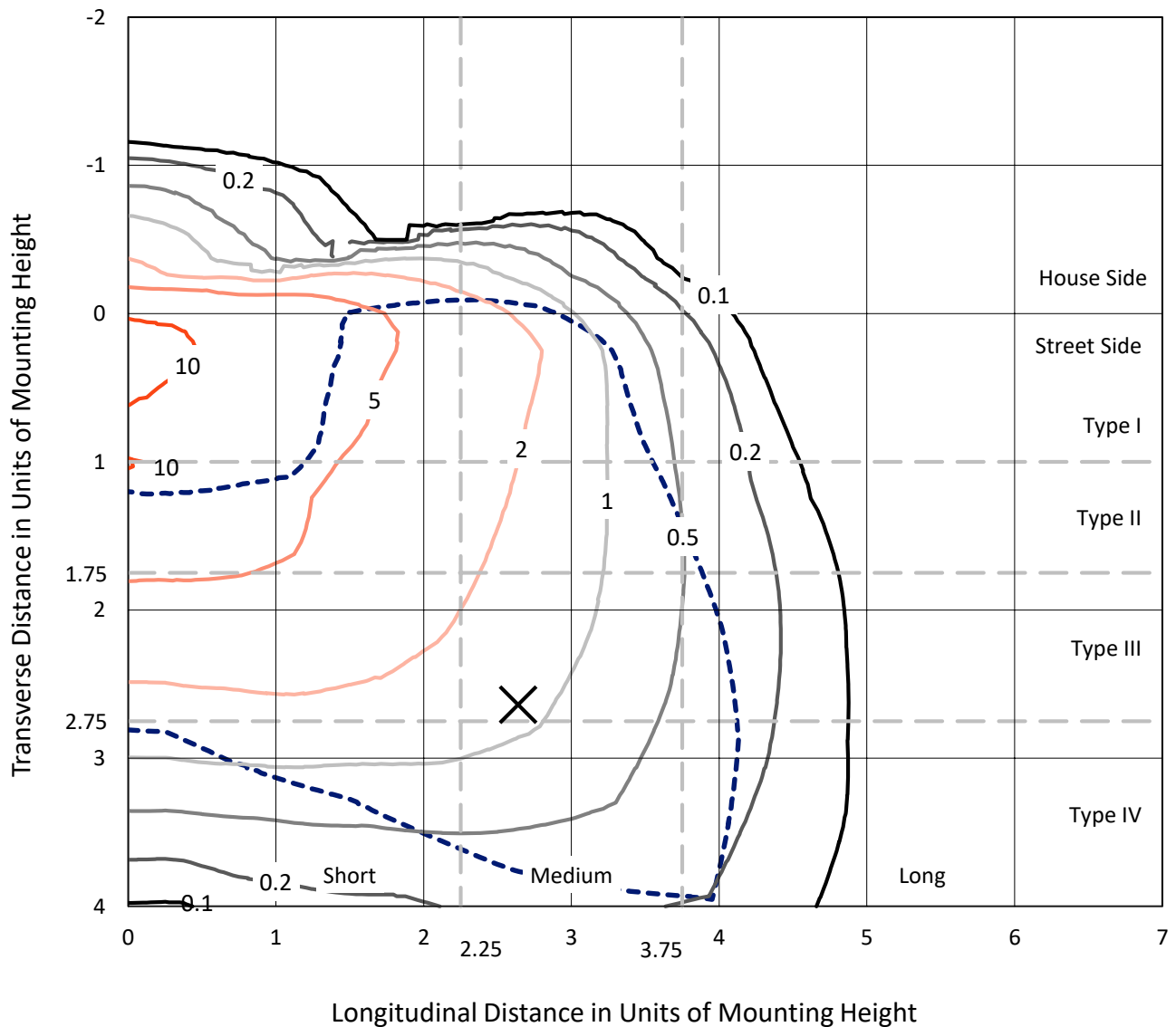


REPORT NUMBER: P265588

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

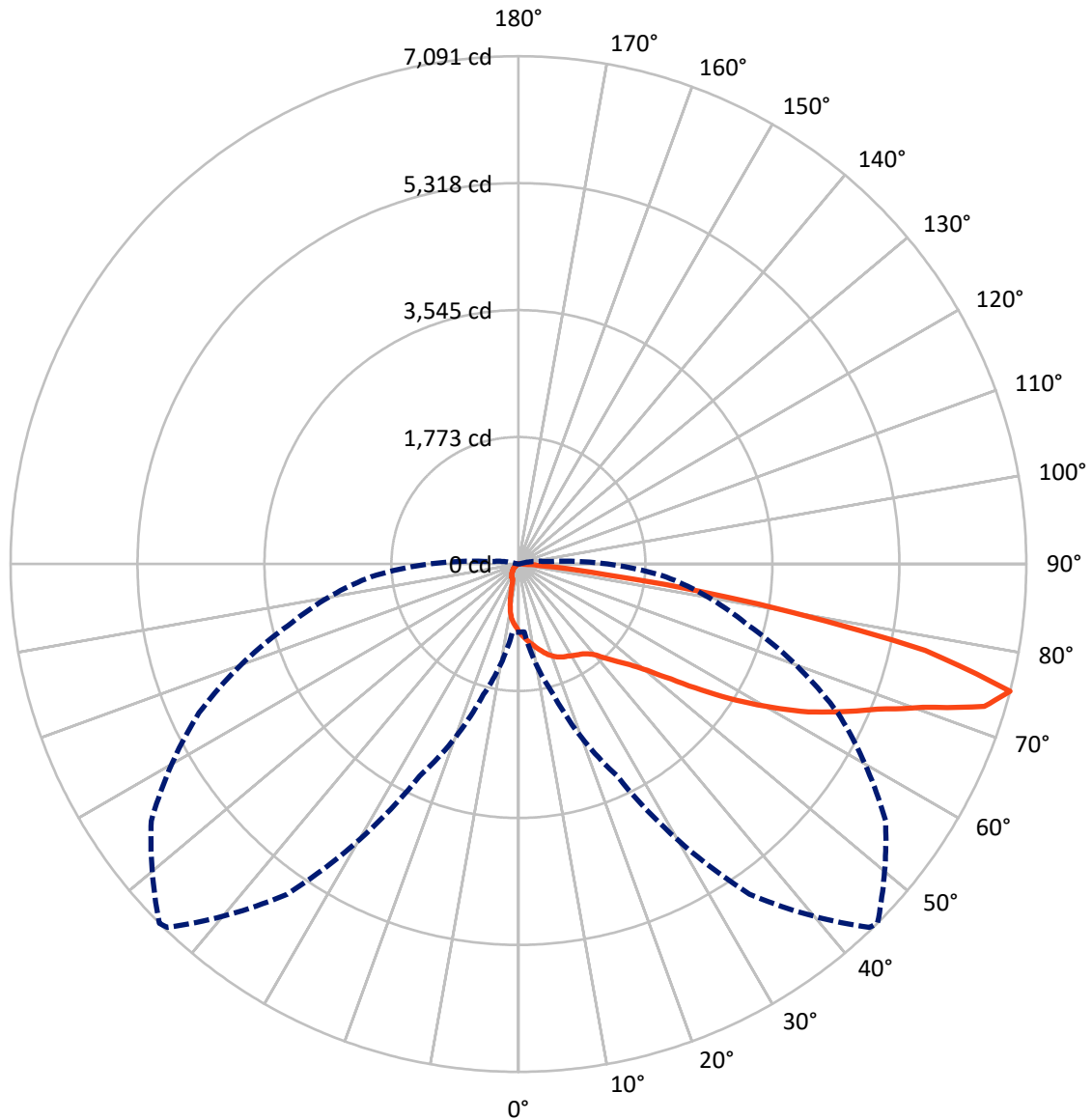


Based on 10 foot mounting height. Maximum calculated value = 12.6 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P265588

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7027-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P265588

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7027-HSS

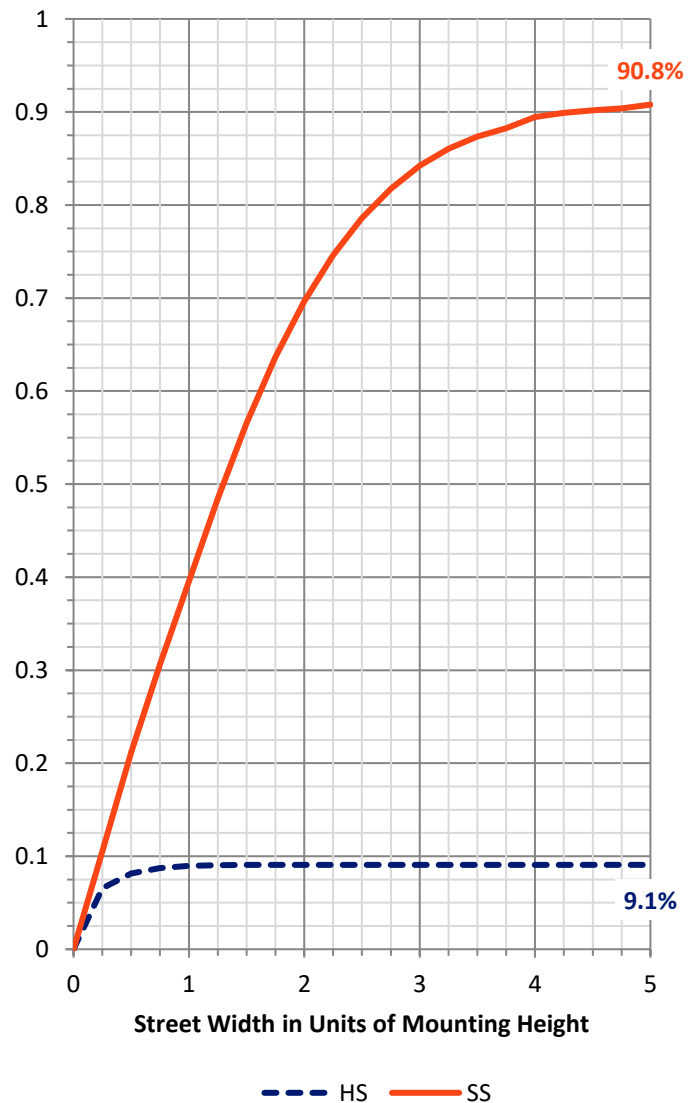
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	806.6	0.0	806.6
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	8012.0	0.0	8012.0
	% Fixture	90.9	0.0	90.9
Total	Lumens	8818.6	0.0	8818.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.0	1.0
10°-20°	252.2	2.9
20°-30°	417.7	4.7
30°-40°	604.4	6.9
40°-50°	989.8	11.2
50°-60°	1763.5	20.0
60°-70°	2592.6	29.4
70°-80°	1955.9	22.2
80°-90°	153.5	1.7
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°	8818.6	100.0
0°-180°	8818.6	100.0



REPORT NUMBER: P265588

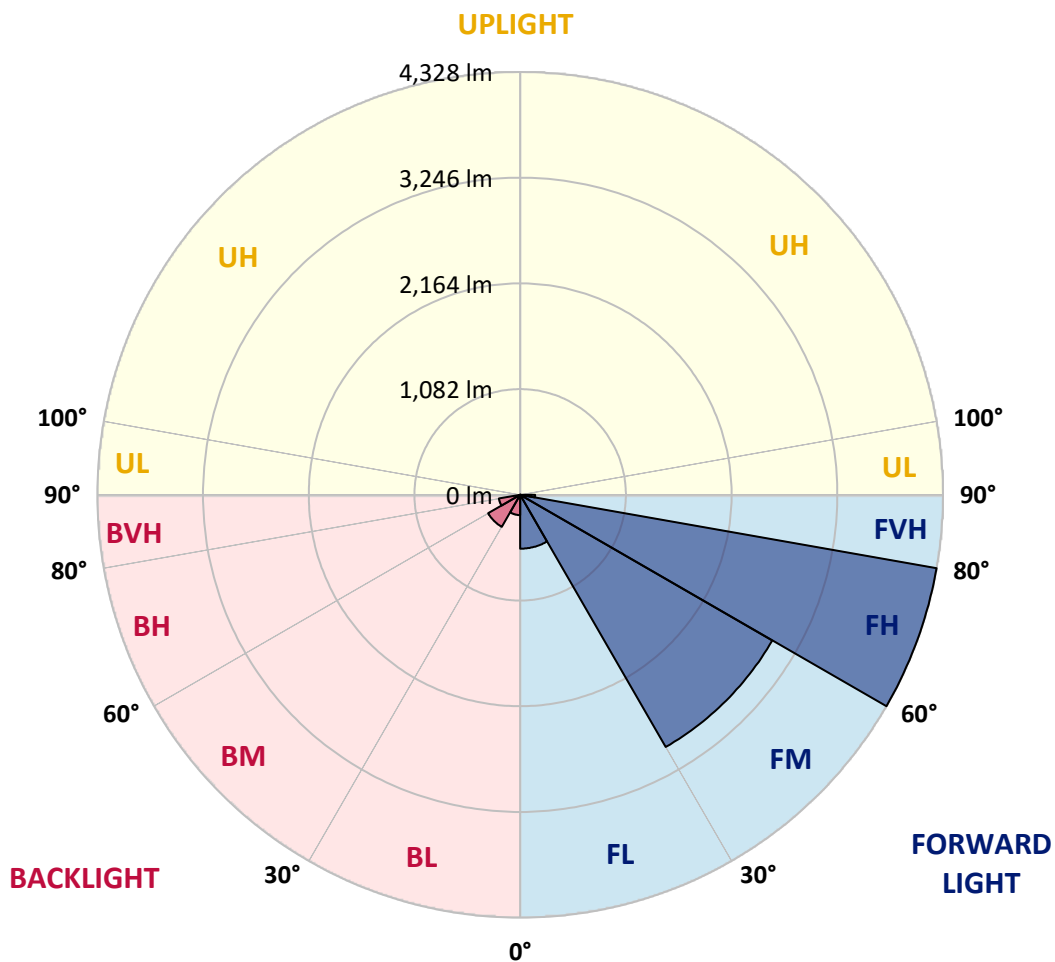
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	551.6	6.3			
FM	(30°-60°)	2979.8	33.8			
FH	(60°-80°)	4327.6	49.1			G2/5000
FVH	(80°-90°)	153.0	1.7			G2/225
BL	(0°-30°)	207.3	2.4	B1/500		
BM	(30°-60°)	378.0	4.3	B1/1000		
BH	(60°-80°)	220.9	2.5	B1/500		G1/500
BVH	(80°-90°)	0.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium





REPORT NUMBER: P265588

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	943.2	943.2	943.2	943.2	943.2	943.2	943.2	943.2	943.2	943.2	943.2
2.5°	1024.5	1024.5	1022.5	1020.5	1010.0	999.5	997.5	991.2	972.4	959.8	947.4
5°	1110.1	1112.2	1108.1	1097.5	1074.6	1051.7	1049.6	1033.0	997.5	972.4	945.2
7.5°	1191.5	1195.7	1185.3	1166.4	1139.3	1106.0	1103.8	1072.5	1026.7	991.2	951.6
10°	1260.4	1260.4	1245.8	1222.9	1193.6	1158.2	1154.0	1118.5	1066.3	1022.5	970.3
12.5°	1335.5	1333.4	1312.6	1281.3	1247.8	1214.5	1212.4	1168.5	1118.5	1062.2	997.5
15°	1404.4	1400.2	1373.1	1343.9	1308.4	1272.9	1270.8	1226.9	1174.9	1108.1	1037.2
17.5°	1441.9	1439.9	1414.8	1385.5	1356.4	1329.2	1327.2	1281.3	1224.8	1156.1	1076.8
20°	1448.2	1450.3	1429.5	1404.4	1387.7	1373.1	1373.1	1331.3	1270.8	1197.8	1118.5
22.5°	1450.3	1456.5	1441.9	1408.5	1404.4	1406.4	1410.6	1377.2	1314.6	1245.8	1162.2
25°	1464.9	1473.2	1462.8	1423.2	1419.0	1433.5	1437.7	1423.2	1366.9	1298.0	1212.4
27.5°	1494.2	1502.4	1494.2	1444.0	1437.7	1452.4	1456.5	1464.9	1423.2	1348.0	1264.5
30°	1552.5	1554.5	1535.8	1473.2	1460.7	1479.5	1485.7	1508.8	1475.2	1396.1	1314.6
32.5°	1654.8	1633.8	1577.6	1494.2	1483.7	1504.5	1510.8	1535.8	1523.3	1441.9	1366.9
35°	1863.4	1754.8	1625.6	1523.3	1512.8	1533.8	1542.1	1577.6	1583.8	1506.5	1431.4
37.5°	1861.4	1763.3	1738.2	1579.7	1565.0	1579.7	1590.1	1633.8	1658.9	1592.2	1525.4
40°	1992.8	1951.1	1951.1	1686.1	1638.1	1658.9	1669.4	1713.2	1757.1	1704.9	1636.1
42.5°	2406.0	2378.8	2349.6	1890.6	1740.3	1798.8	1805.1	1832.2	1884.4	1867.7	1786.2
45°	2867.2	2842.1	2729.4	2237.0	1915.6	1926.1	1940.7	1984.4	2059.6	2090.8	1994.9
47.5°	3228.1	3203.1	3107.1	2654.3	2189.0	2097.2	2097.2	2182.7	2299.7	2378.8	2287.1
50°	3518.2	3488.9	3430.5	3098.8	2637.7	2343.4	2330.8	2431.1	2604.2	2727.3	2664.7
52.5°	3799.9	3714.3	3678.9	3557.8	3144.6	2700.2	2666.8	2737.8	2977.7	3130.1	3078.0
55°	3987.8	3975.2	3937.6	3979.4	3676.9	3134.2	3105.0	3119.6	3420.1	3522.3	3457.7
57.5°	4163.0	4160.9	4244.4	4438.4	4256.9	3630.9	3585.0	3562.0	3847.9	3822.8	3879.2
60°	4380.0	4342.4	4536.5	4814.0	4789.0	4115.0	4062.9	4017.0	4175.5	4104.5	4384.2
62.5°	4390.5	4380.0	4774.4	5173.0	5317.0	4607.4	4547.0	4382.1	4461.4	4380.0	4866.3
65°	3991.9	4044.1	4874.7	5362.9	5759.4	5039.4	4966.4	4709.8	4716.0	4661.8	5433.8
67.5°	3902.1	3929.2	4599.1	5567.3	6078.7	5475.6	5406.7	5087.5	5012.4	5016.4	5769.8
70°	3678.9	3720.6	4256.9	5552.8	6331.2	6057.8	5988.9	5642.6	5460.9	5258.6	5511.0
72.5°	2810.7	2881.8	3587.1	4868.4	6262.3	6819.5	6800.6	6345.7	5640.4	4828.7	4169.3
75°	951.6	949.5	1884.4	3269.9	5625.7	7053.1	7090.7	6258.1	4920.5	3330.3	2070.1
77.5°	204.5	206.6	388.2	1325.1	3737.3	5663.4	5807.4	4720.1	3173.9	1483.7	473.6
80°	100.3	102.2	160.6	350.6	1494.2	3176.0	3401.3	2426.9	1172.7	296.4	79.3
82.5°	50.0	52.2	83.5	185.7	552.9	1128.9	1206.2	893.2	336.0	166.9	39.6
85°	18.8	18.8	41.7	110.6	252.6	265.0	325.5	258.7	202.4	135.6	10.4
87.5°	4.2	4.2	22.9	54.3	112.6	83.5	83.5	79.3	123.1	91.7	4.2
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: P265588

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	943.2	943.2	943.2	943.2	943.2	943.2	943.2	943.2	943.2	943.2	943.2
2.5°	941.2	932.8	918.2	903.5	893.2	880.6	874.3	868.1	866.0	863.9	868.1
5°	930.6	918.2	890.9	868.1	847.2	830.6	817.9	805.5	799.2	795.0	797.2
7.5°	930.6	911.9	872.3	836.9	803.4	768.0	732.5	705.3	684.5	671.9	674.0
10°	941.2	916.1	863.9	815.9	753.3	678.2	601.0	542.5	503.0	480.0	480.0
12.5°	964.2	930.6	866.0	790.9	684.5	552.9	436.1	365.3	336.0	319.3	321.4
15°	995.3	955.7	876.4	757.5	588.5	411.1	304.6	258.7	258.7	262.9	265.0
17.5°	1030.8	987.0	884.8	707.3	465.3	294.3	239.9	235.7	242.1	252.6	252.6
20°	1066.3	1018.3	889.0	628.2	348.5	233.6	227.5	227.5	231.7	242.1	244.2
22.5°	1110.1	1057.9	884.8	530.0	260.9	221.3	219.0	219.0	219.0	231.7	231.7
25°	1156.1	1103.8	868.1	425.6	221.3	212.9	210.7	208.6	208.6	219.0	221.3
27.5°	1208.2	1151.8	828.4	325.5	208.6	204.5	202.4	198.3	198.3	206.6	206.6
30°	1260.4	1206.2	768.0	246.2	198.3	196.2	192.0	187.7	183.7	192.0	192.0
32.5°	1316.7	1262.5	688.6	196.2	183.7	183.7	181.5	175.3	171.0	175.3	177.3
35°	1391.8	1327.2	598.9	171.0	164.8	164.8	164.8	162.8	154.4	158.6	158.6
37.5°	1492.1	1416.8	494.5	158.6	150.2	146.1	146.1	146.1	139.7	141.9	141.9
40°	1619.3	1521.2	394.4	148.2	139.7	129.4	125.3	127.3	123.1	123.1	121.0
42.5°	1792.5	1633.8	296.4	139.7	131.4	116.9	108.5	106.4	102.2	100.3	100.3
45°	2040.8	1771.6	212.9	131.4	125.3	102.2	94.0	87.7	77.3	71.0	71.0
47.5°	2362.2	1928.1	158.6	123.1	118.9	89.7	79.3	66.7	52.2	48.0	48.0
50°	2754.5	2103.4	133.6	110.6	108.5	79.3	62.6	43.7	29.3	25.1	27.0
52.5°	3136.3	2268.3	118.9	98.1	95.9	68.9	46.0	22.9	12.5	12.5	12.5
55°	3457.7	2385.1	108.5	87.7	83.5	54.3	25.1	10.4	6.3	6.3	6.3
57.5°	3747.8	2452.0	98.1	77.3	66.7	37.5	10.4	4.2	4.2	2.1	2.1
60°	4012.8	2491.5	85.6	66.7	52.2	20.9	4.2	2.1	2.1	0.0	0.0
62.5°	4273.5	2520.7	73.0	54.3	39.6	8.4	2.1	2.1	0.0	0.0	0.0
65°	4471.9	2510.4	58.4	43.7	25.1	4.2	2.1	0.0	0.0	0.0	0.0
67.5°	4465.6	2368.4	43.7	33.3	12.5	2.1	0.0	0.0	0.0	0.0	0.0
70°	3994.0	1994.9	29.3	20.9	4.2	2.1	0.0	0.0	0.0	0.0	0.0
72.5°	2833.8	1279.1	18.8	12.5	2.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	1247.8	388.2	10.4	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	244.2	89.7	6.3	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	58.4	10.4	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	25.1	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.3	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.2	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)