

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: P265597

Luminaire Tested: **ARCH-L-AF72-110-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265597
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-AF72-110-D-U-T4W-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 485mA 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: 9639.1 lumens
Efficiency: N/A
Efficacy: 85.3 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): 113
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

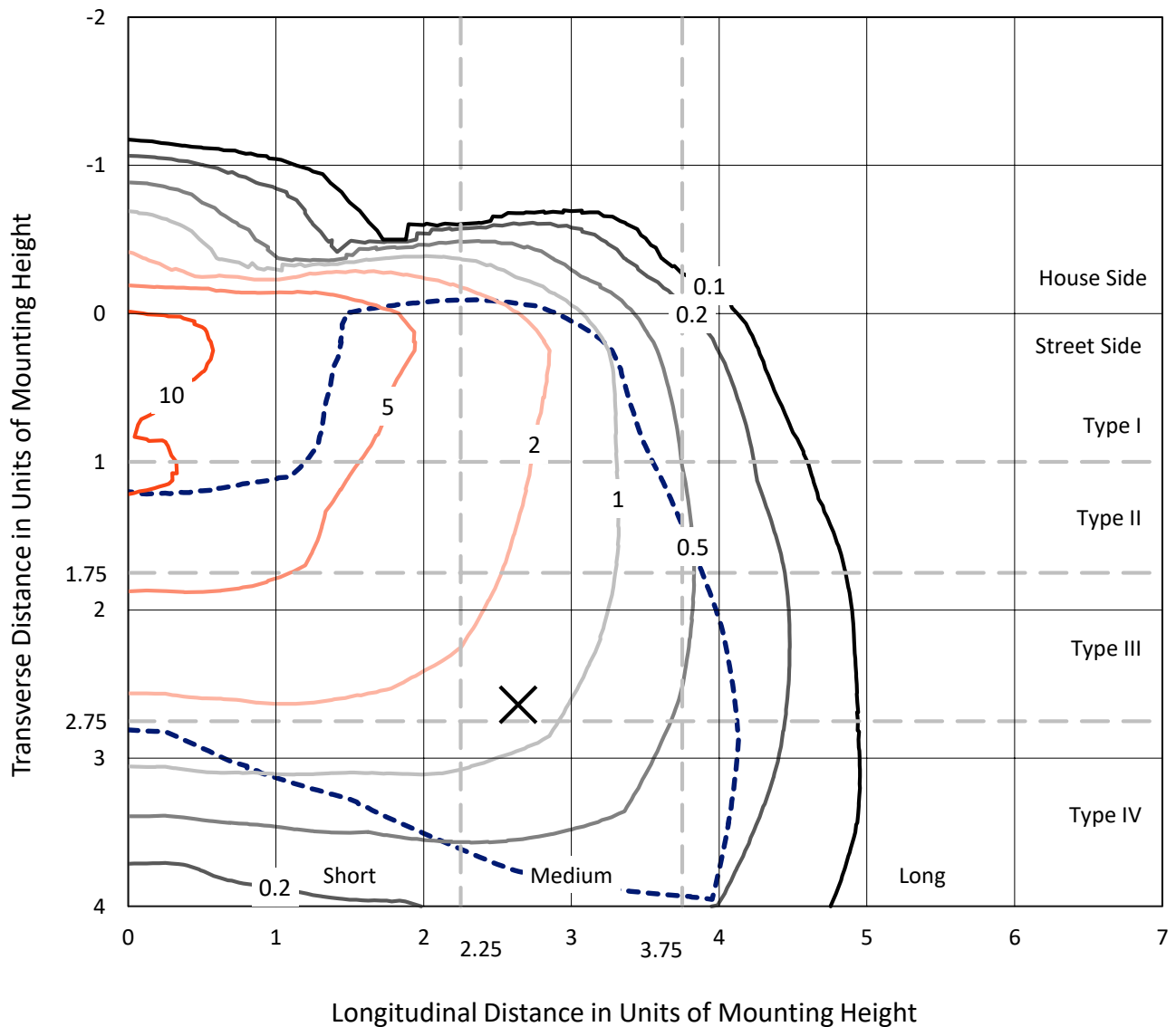


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

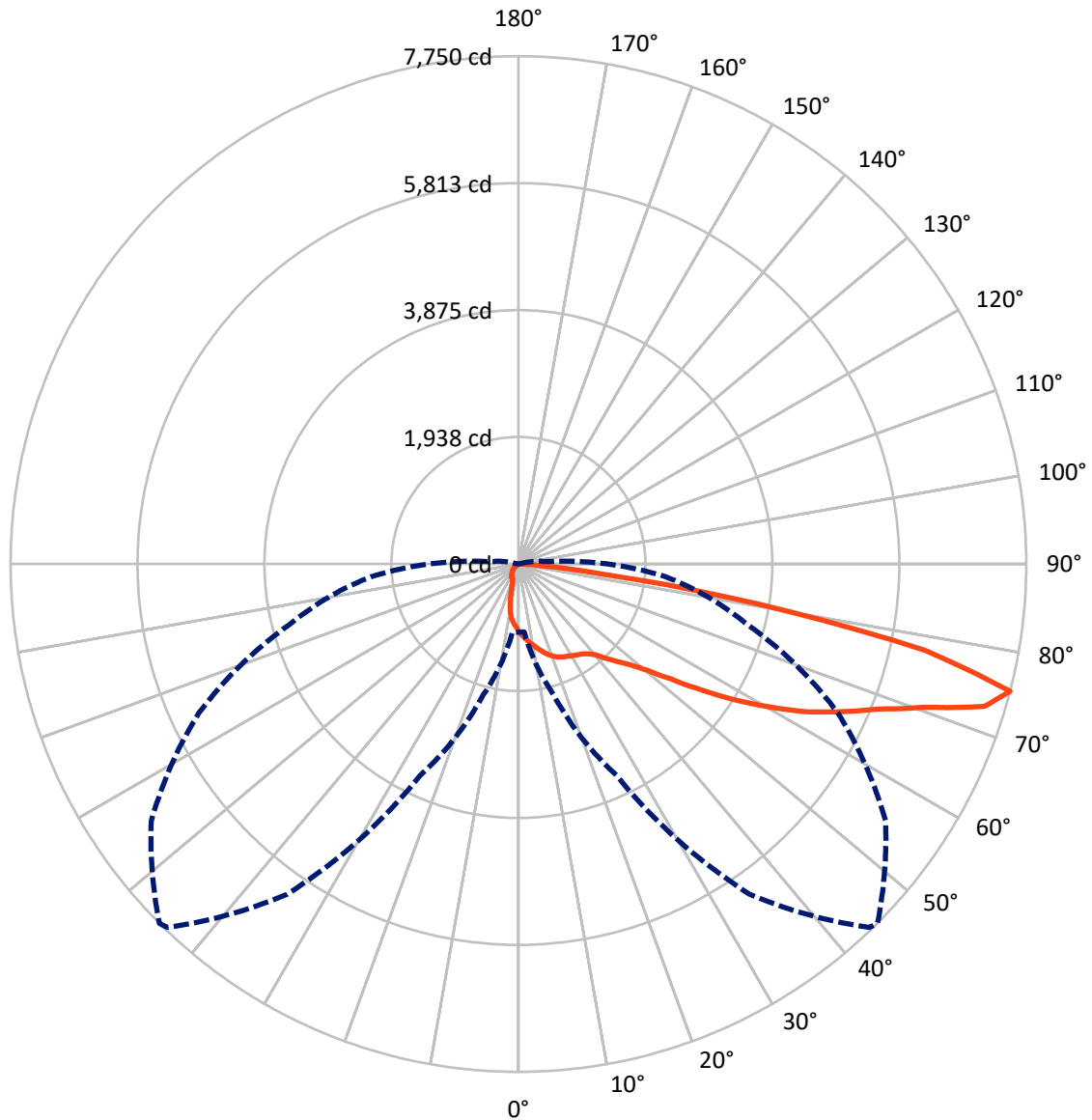


Based on 10 foot mounting height. Maximum calculated value = 13.8 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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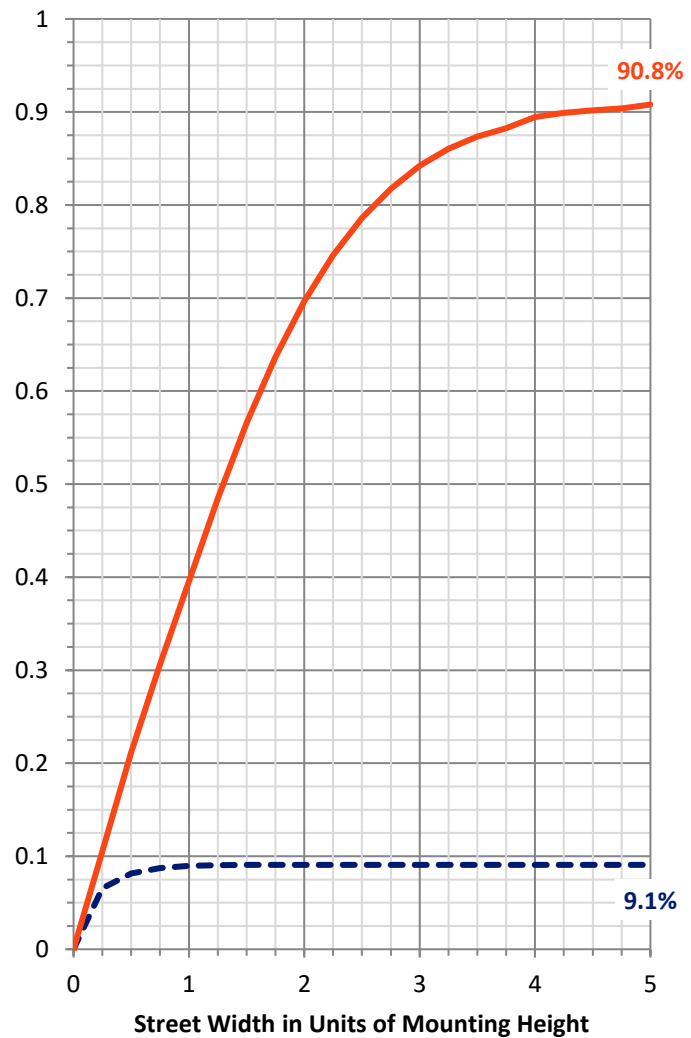
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	881.7	0.0	881.7
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	8757.4	0.0	8757.4
	% Fixture	90.9	0.0	90.9
Total	Lumens	9639.1	0.0	9639.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.3	1.0
10°-20°	275.7	2.9
20°-30°	456.5	4.7
30°-40°	660.7	6.9
40°-50°	1081.9	11.2
50°-60°	1927.6	20.0
60°-70°	2833.9	29.4
70°-80°	2137.9	22.2
80°-90°	167.7	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°	9639.1	100.0
0°-180°	9639.1	100.0



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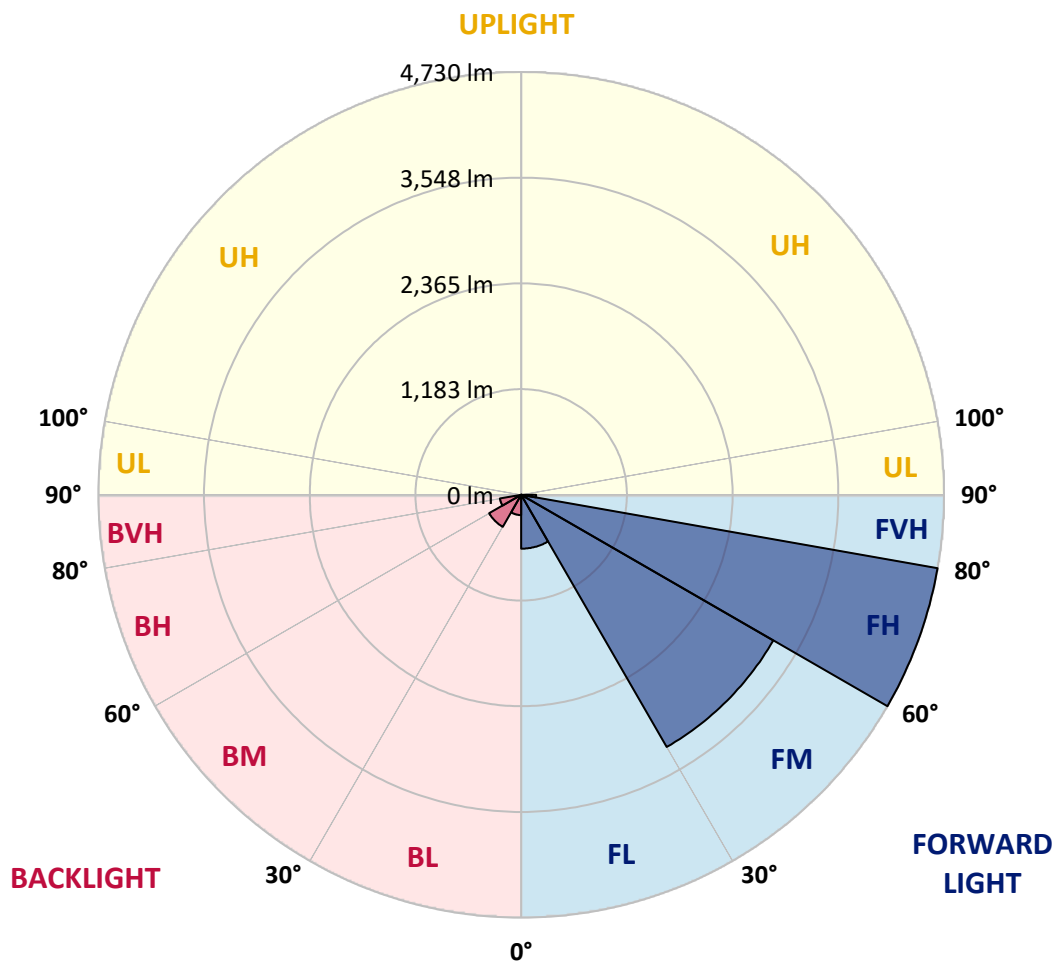
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	602.9	6.3			
FM	(30°-60°)	3257.0	33.8			
FH	(60°-80°)	4730.3	49.1			G2/5000
FVH	(80°-90°)	167.3	1.7			G2/225
BL	(0°-30°)	226.6	2.4	B1/500		
BM	(30°-60°)	413.2	4.3	B1/1000		
BH	(60°-80°)	241.5	2.5	B1/500		G1/500
BVH	(80°-90°)	0.5	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1031.0	1031.0	1031.0	1031.0	1031.0	1031.0	1031.0	1031.0	1031.0	1031.0	1031.0
2.5°	1119.8	1119.8	1117.6	1115.3	1103.9	1092.6	1090.3	1083.4	1062.9	1049.2	1035.6
5°	1213.4	1215.6	1211.2	1199.7	1174.7	1149.7	1147.2	1129.0	1090.3	1062.9	1033.2
7.5°	1302.5	1306.9	1295.5	1275.1	1245.4	1208.8	1206.7	1172.4	1122.3	1083.4	1040.1
10°	1377.6	1377.6	1361.7	1336.6	1304.7	1265.9	1261.3	1222.6	1165.6	1117.6	1060.5
12.5°	1459.7	1457.5	1434.7	1400.5	1363.9	1327.4	1325.2	1277.3	1222.6	1161.0	1090.3
15°	1535.1	1530.4	1500.8	1468.9	1430.1	1391.4	1389.0	1341.2	1284.1	1211.2	1133.7
17.5°	1576.0	1573.8	1546.4	1514.5	1482.6	1452.9	1450.7	1400.5	1338.8	1263.6	1176.9
20°	1583.0	1585.1	1562.4	1535.1	1516.8	1500.8	1500.8	1455.3	1389.0	1309.2	1222.6
22.5°	1585.1	1592.1	1576.0	1539.5	1535.1	1537.3	1541.9	1505.4	1437.0	1361.7	1270.5
25°	1601.1	1610.3	1599.0	1555.5	1551.1	1567.0	1571.6	1555.5	1494.1	1418.8	1325.2
27.5°	1633.1	1642.2	1633.1	1578.3	1571.6	1587.5	1592.1	1601.1	1555.5	1473.4	1382.2
30°	1697.0	1699.2	1678.8	1610.3	1596.6	1617.2	1624.0	1649.1	1612.5	1526.0	1437.0
32.5°	1808.7	1785.9	1724.3	1633.1	1621.7	1644.4	1651.4	1678.8	1665.1	1576.0	1494.1
35°	2036.8	1918.2	1776.8	1665.1	1653.6	1676.4	1685.6	1724.3	1731.3	1646.9	1564.7
37.5°	2034.5	1927.4	1899.9	1726.6	1710.6	1726.6	1738.0	1785.9	1813.3	1740.2	1667.3
40°	2178.2	2132.7	2132.7	1843.0	1790.5	1813.3	1824.6	1872.5	1920.4	1863.4	1788.2
42.5°	2629.9	2600.2	2568.3	2066.6	1902.3	1966.1	1972.9	2002.6	2059.6	2041.4	1952.5
45°	3133.9	3106.6	2983.5	2445.0	2093.9	2105.3	2121.2	2169.0	2251.2	2285.5	2180.5
47.5°	3528.5	3501.1	3396.2	2901.3	2392.6	2292.3	2292.3	2385.8	2513.5	2600.2	2499.9
50°	3845.6	3813.7	3749.7	3387.1	2883.0	2561.4	2547.8	2657.2	2846.5	2981.1	2912.7
52.5°	4153.5	4060.0	4021.3	3888.9	3437.3	2951.4	2915.0	2992.6	3254.7	3421.4	3364.3
55°	4358.8	4345.1	4304.0	4349.7	4018.8	3425.9	3393.9	3410.0	3738.3	3850.1	3779.3
57.5°	4550.4	4548.1	4639.2	4851.4	4653.0	3968.7	3918.5	3893.4	4206.0	4178.6	4240.2
60°	4787.5	4746.6	4958.6	5262.0	5234.7	4498.0	4441.0	4390.6	4564.1	4486.4	4792.1
62.5°	4798.9	4787.5	5218.7	5654.3	5811.7	5036.2	4970.1	4789.9	4876.4	4787.5	5319.0
65°	4363.2	4420.3	5328.1	5861.9	6295.2	5508.3	5428.5	5147.9	5154.7	5095.5	5939.5
67.5°	4265.2	4294.8	5027.1	6085.4	6644.3	5985.0	5909.8	5560.8	5478.7	5483.3	6306.6
70°	4021.3	4066.7	4653.0	6069.4	6920.3	6621.3	6546.0	6167.6	5969.1	5747.9	6023.9
72.5°	3072.4	3149.8	3920.8	5321.3	6844.9	7454.0	7433.4	6936.2	6165.2	5277.9	4557.2
75°	1040.1	1037.8	2059.6	3574.1	6149.3	7709.3	7750.4	6840.4	5378.3	3640.3	2262.7
77.5°	223.5	225.8	424.2	1448.3	4085.0	6190.3	6347.8	5159.3	3469.3	1621.7	517.8
80°	109.5	111.7	175.6	383.1	1633.1	3471.5	3717.8	2652.7	1281.8	323.8	86.6
82.5°	54.7	57.0	91.3	202.9	604.4	1233.9	1318.4	976.2	367.2	182.4	43.4
85°	20.5	20.5	45.6	120.9	276.0	289.7	355.8	282.8	221.3	148.3	11.4
87.5°	4.5	4.5	25.2	59.3	123.2	91.3	91.3	86.6	134.6	100.4	4.5
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°	1031.0	1031.0	1031.0	1031.0	1031.0	1031.0	1031.0	1031.0	1031.0	1031.0	1031.0
2.5°	1028.6	1019.5	1003.5	987.6	976.2	962.5	955.6	948.8	946.5	944.3	948.8
5°	1017.3	1003.5	973.9	948.8	926.1	907.7	894.2	880.3	873.6	869.0	871.3
7.5°	1017.3	996.8	953.5	914.7	878.2	839.3	800.6	770.9	748.1	734.5	736.7
10°	1028.6	1001.3	944.3	891.8	823.3	741.3	656.9	593.1	549.8	524.6	524.6
12.5°	1053.7	1017.3	946.5	864.4	748.1	604.4	476.7	399.1	367.2	349.0	351.2
15°	1087.9	1044.6	958.0	828.0	643.1	449.3	333.0	282.8	282.8	287.4	289.7
17.5°	1126.7	1078.9	967.0	773.3	508.6	321.7	262.3	257.8	264.6	276.0	276.0
20°	1165.6	1113.1	971.6	686.6	380.9	255.5	248.7	248.7	253.2	264.6	266.8
22.5°	1213.4	1156.4	967.0	579.3	285.1	241.7	239.5	239.5	239.5	253.2	253.2
25°	1263.6	1206.7	948.8	465.3	241.7	232.7	230.3	228.1	228.1	239.5	241.7
27.5°	1320.6	1259.1	905.5	355.8	228.1	223.5	221.3	216.8	216.8	225.8	225.8
30°	1377.6	1318.4	839.3	269.1	216.8	214.3	209.8	205.4	200.7	209.8	209.8
32.5°	1439.3	1379.9	752.7	214.3	200.7	200.7	198.4	191.6	187.0	191.6	193.9
35°	1521.4	1450.7	654.7	187.0	180.2	180.2	180.2	178.0	168.8	173.4	173.4
37.5°	1630.9	1548.7	540.6	173.4	164.2	159.7	159.7	159.7	152.8	155.0	155.0
40°	1770.0	1662.8	431.0	162.0	152.8	141.5	136.8	139.1	134.6	134.6	132.3
42.5°	1959.3	1785.9	323.8	152.8	143.6	127.6	118.5	116.3	111.7	109.5	109.5
45°	2230.8	1936.4	232.7	143.6	136.8	111.7	102.6	95.8	84.4	77.6	77.6
47.5°	2582.0	2107.6	173.4	134.6	130.1	98.1	86.6	73.0	57.0	52.6	52.6
50°	3010.8	2299.1	146.0	120.9	118.5	86.6	68.5	47.9	31.9	27.4	29.6
52.5°	3428.1	2479.3	130.1	107.2	104.9	75.3	50.1	25.2	13.7	13.7	13.7
55°	3779.3	2607.1	118.5	95.8	91.3	59.3	27.4	11.4	6.8	6.8	6.8
57.5°	4096.5	2680.1	107.2	84.4	73.0	41.1	11.4	4.5	4.5	2.2	2.2
60°	4386.2	2723.4	93.6	73.0	57.0	22.7	4.5	2.2	2.2	0.0	0.0
62.5°	4671.2	2755.3	79.8	59.3	43.4	9.2	2.2	2.2	0.0	0.0	0.0
65°	4887.9	2744.0	63.9	47.9	27.4	4.5	2.2	0.0	0.0	0.0	0.0
67.5°	4881.1	2588.7	47.9	36.6	13.7	2.2	0.0	0.0	0.0	0.0	0.0
70°	4365.7	2180.5	31.9	22.7	4.5	2.2	0.0	0.0	0.0	0.0	0.0
72.5°	3097.4	1398.2	20.5	13.7	2.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	1363.9	424.2	11.4	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	266.8	98.1	6.8	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	63.9	11.4	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	27.4	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.8	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.5	2.2	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)