

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: P400539

Luminaire Tested: **ARCH-L-PA3-90-827-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400539  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-90-827-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 400mA 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: 8233 lumens  
Efficiency: N/A  
Efficacy: 88.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G2

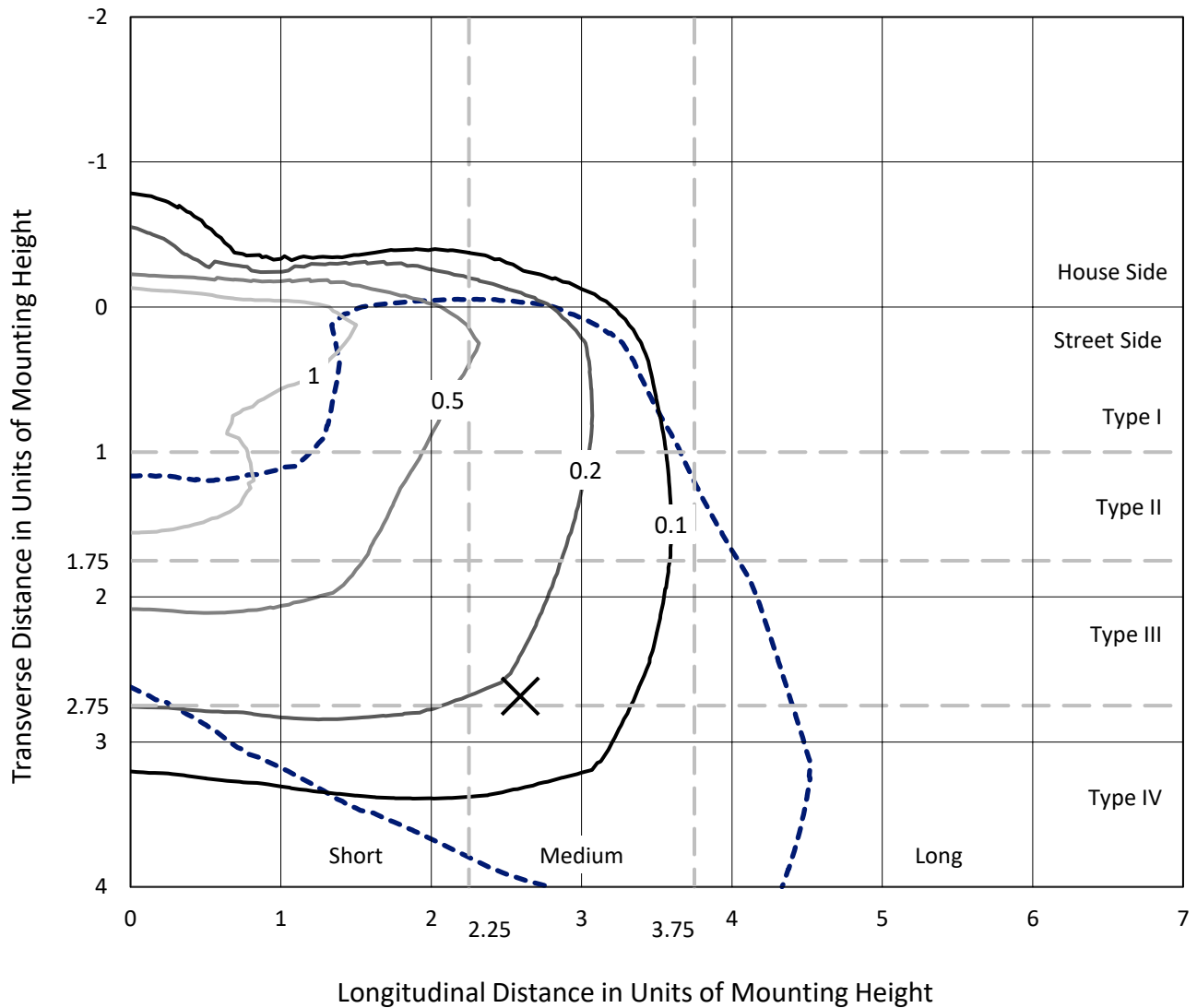
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

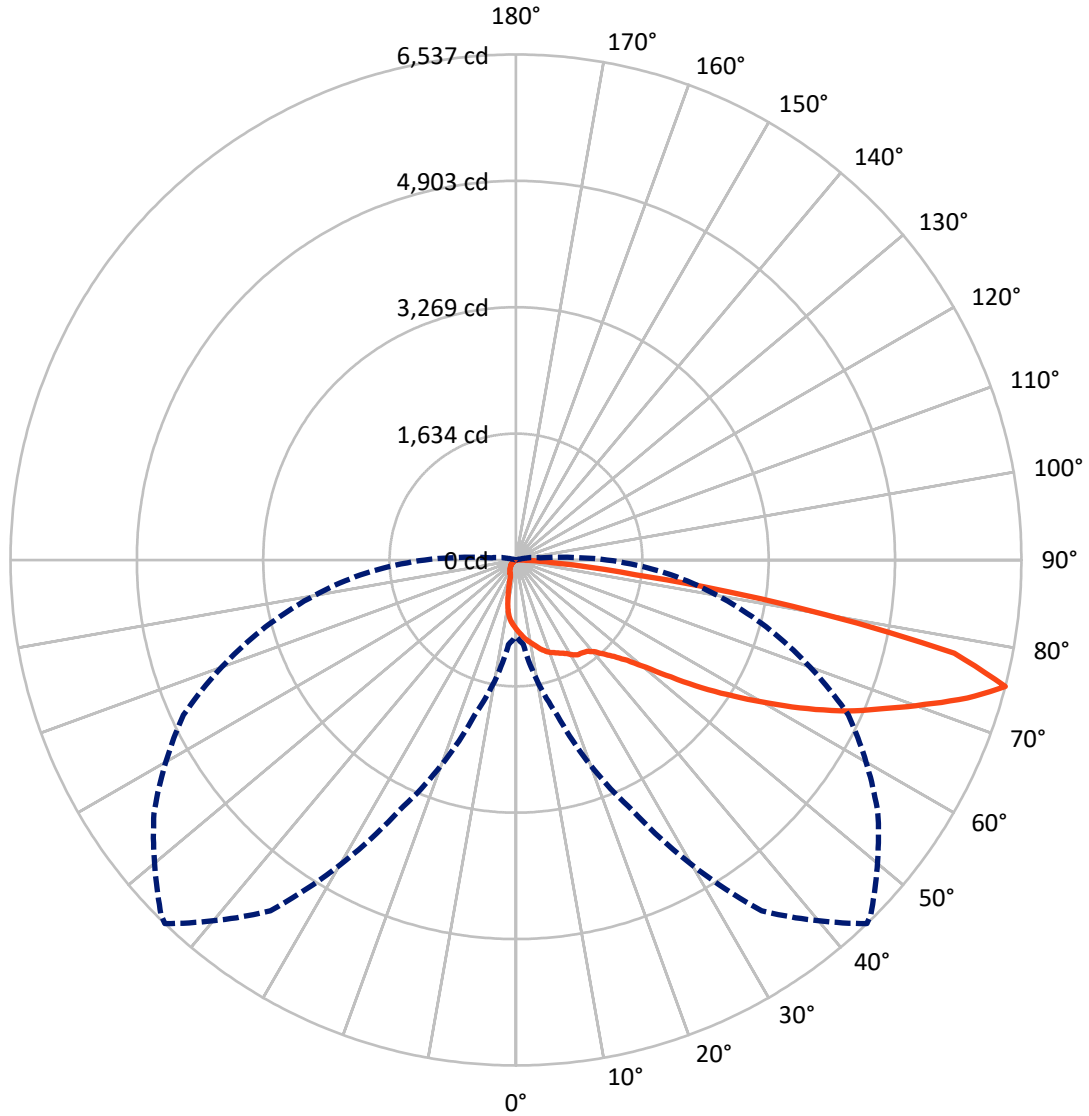
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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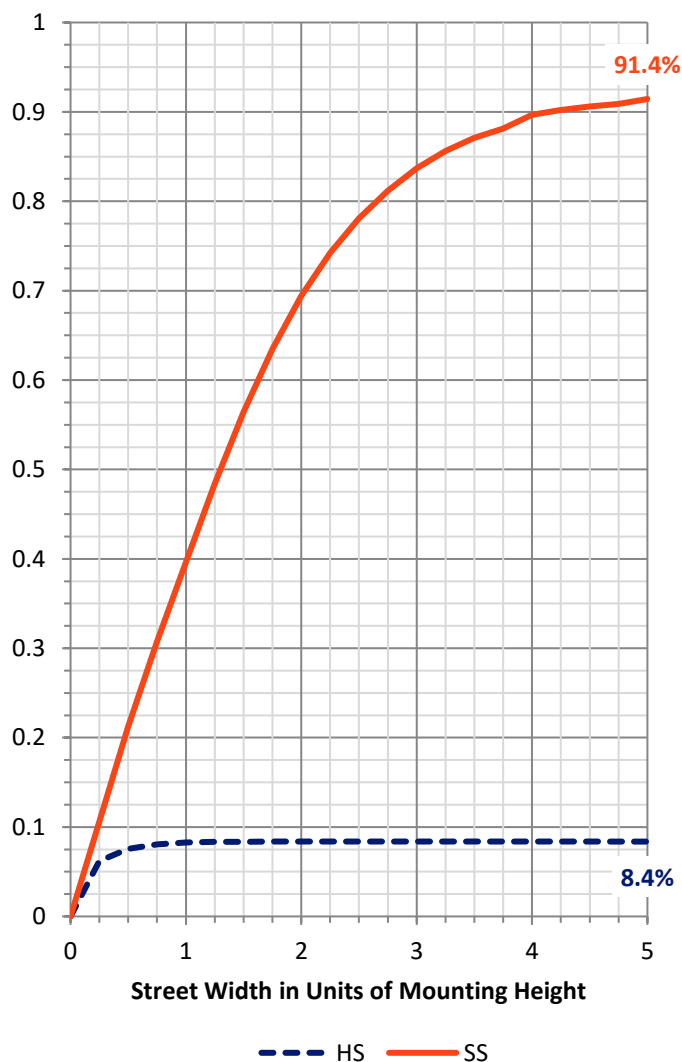
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	694.3	0.0	694.3
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	7538.7	0.0	7538.7
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	8233.0	0.0	8233.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.5	1.0
10°-20°	236.8	2.9
20°-30°	390.8	4.7
30°-40°	567.2	6.9
40°-50°	922.0	11.2
50°-60°	1625.5	19.7
60°-70°	2336.1	28.4
70°-80°	1870.7	22.7
80°-90°	199.3	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°	8233.0	100.0
0°-180°	8233.0	100.0

**Coefficient of Utilization**



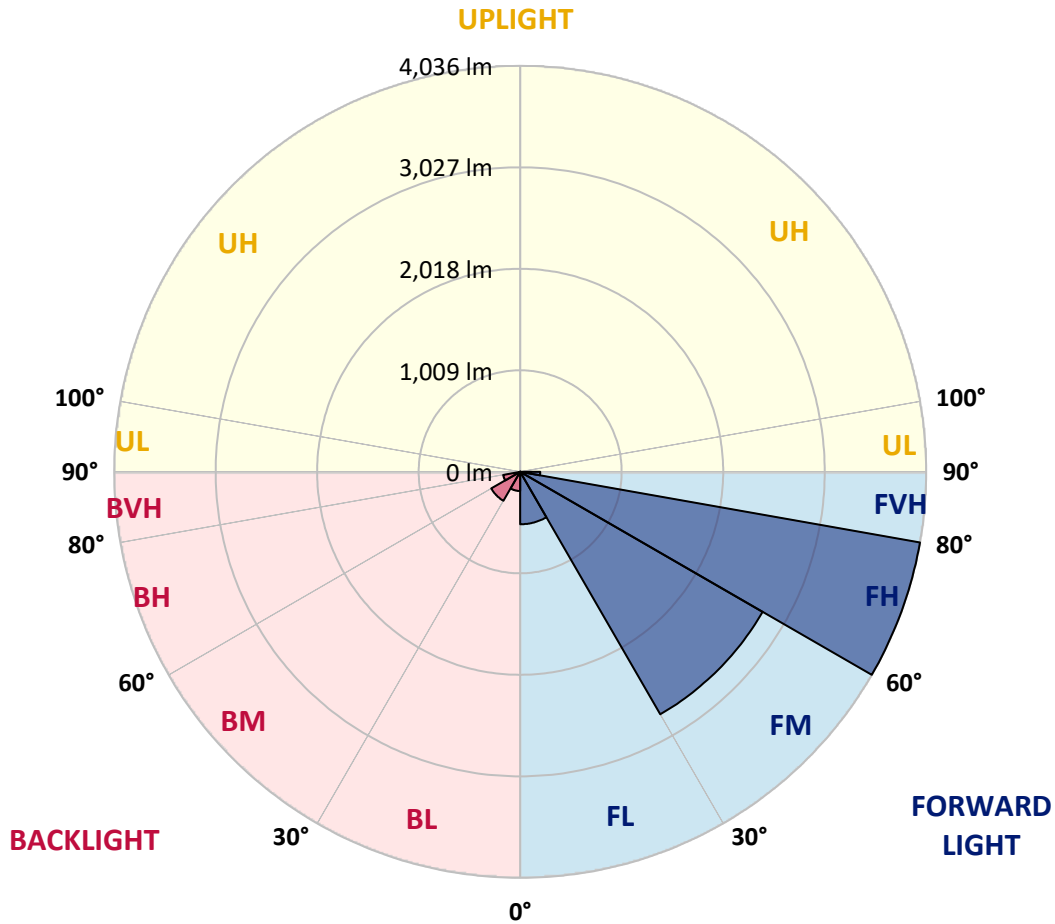
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	521.4	6.3			
FM (30°-60°)	2782.8	33.8			
FH (60°-80°)	4035.7	49.0			G2/5000
FVH (80°-90°)	198.8	2.4			G2/225
BL (0°-30°)	190.8	2.3	B1/500		
BM (30°-60°)	331.9	4.0	B1/1000		
BH (60°-80°)	171.2	2.1	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°	896.1	896.1	896.1	896.1	896.1	896.1	896.1	896.1	896.1	896.1	896.1
2.5°	976.6	975.1	970.6	963.0	955.4	947.8	946.3	934.1	920.4	909.8	900.7
5°	1063.2	1061.7	1054.1	1037.4	1020.7	1000.9	999.4	970.6	944.7	915.9	891.6
7.5°	1152.8	1149.8	1136.1	1110.3	1081.4	1051.1	1048.0	1005.5	967.5	929.5	894.6
10°	1222.7	1219.6	1199.9	1169.5	1130.0	1092.1	1087.5	1043.5	1005.5	956.9	909.8
12.5°	1291.0	1285.0	1259.1	1225.7	1177.1	1140.7	1136.1	1090.5	1045.0	994.9	937.1
15°	1354.8	1347.2	1322.9	1280.4	1228.8	1193.8	1190.8	1142.2	1095.1	1037.4	973.6
17.5°	1398.9	1395.8	1367.0	1319.9	1269.8	1240.9	1237.9	1187.8	1140.7	1079.9	1011.6
20°	1421.7	1421.7	1394.3	1342.7	1297.1	1277.4	1272.8	1225.7	1180.2	1122.4	1051.1
22.5°	1426.2	1430.8	1409.5	1353.3	1319.9	1303.2	1300.1	1259.1	1215.1	1161.9	1095.1
25°	1435.3	1435.3	1424.7	1363.9	1339.6	1335.1	1333.6	1297.1	1257.6	1204.5	1139.1
27.5°	1446.0	1446.0	1438.4	1379.1	1370.0	1368.5	1367.0	1350.3	1318.4	1256.1	1190.8
30°	1473.3	1474.8	1468.7	1409.5	1403.4	1420.1	1423.2	1414.1	1374.6	1297.1	1244.0
32.5°	1541.6	1528.0	1511.3	1430.8	1441.4	1462.7	1464.2	1446.0	1403.4	1341.2	1307.7
35°	1713.3	1632.8	1556.8	1449.0	1453.6	1474.8	1477.9	1476.3	1450.5	1397.4	1380.6
37.5°	1872.8	1758.8	1651.0	1491.5	1476.3	1499.1	1505.2	1531.0	1511.3	1474.8	1479.4
40°	1965.4	1921.4	1845.4	1608.5	1521.9	1556.8	1562.9	1602.4	1594.8	1579.6	1608.5
42.5°	2251.0	2254.0	2172.0	1783.1	1605.4	1661.6	1669.2	1701.1	1711.8	1719.4	1789.2
45°	2582.1	2592.7	2573.0	2097.6	1763.4	1781.6	1792.3	1834.8	1874.3	1922.9	2050.5
47.5°	2980.0	2970.9	2898.0	2481.8	2038.3	1936.6	1944.1	2026.2	2094.5	2200.8	2383.1
50°	3332.4	3355.2	3217.0	2840.3	2425.6	2181.1	2173.5	2254.0	2377.0	2525.9	2755.2
52.5°	3687.8	3654.4	3467.6	3195.7	2884.3	2513.7	2490.9	2535.0	2708.1	2884.3	3119.8
55°	3782.0	3785.0	3721.2	3584.5	3267.1	2917.7	2879.8	2876.7	3092.4	3212.4	3502.5
57.5°	3967.3	3974.9	3990.1	4017.4	3867.0	3321.8	3282.3	3239.7	3449.3	3519.2	3886.8
60°	4155.6	4164.7	4257.4	4404.7	4304.5	3757.7	3715.1	3614.9	3731.9	3826.0	4290.8
62.5°	4131.3	4195.1	4463.9	4757.1	4744.9	4236.1	4183.0	3941.5	4015.9	4097.9	4661.4
65°	3730.3	3798.7	4403.2	4854.3	5186.9	4708.5	4621.9	4278.6	4283.2	4381.9	5018.3
67.5°	3371.9	3446.3	4023.5	4813.3	5478.5	5132.2	5042.6	4617.4	4546.0	4710.0	5209.7
70°	3165.3	3239.7	3721.2	4685.7	5560.6	5601.6	5524.1	5004.7	4858.9	5009.2	4995.5
72.5°	2477.3	2594.2	3335.4	4442.7	5648.7	6104.3	6043.6	5495.3	5124.7	4696.3	3803.2
75°	987.3	1095.1	2082.4	3575.4	5537.8	6537.2	6490.1	5715.5	4743.4	3353.7	1947.2
77.5°	297.7	319.0	578.7	1768.0	4059.9	5796.0	5780.8	4805.7	3356.7	1556.8	531.6
80°	98.7	109.4	177.7	487.6	1853.0	3621.0	3689.3	3062.0	1524.9	356.9	107.8
82.5°	41.0	45.6	89.6	195.9	656.2	1559.9	1537.1	1371.5	531.6	221.8	39.5
85°	10.6	13.7	41.0	112.4	240.0	537.7	565.0	460.2	300.7	183.8	12.2
87.5°	0.0	0.0	19.7	45.6	107.8	162.5	170.1	139.7	170.1	138.2	6.1
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°	896.1	896.1	896.1	896.1	896.1	896.1	896.1	896.1	896.1	896.1	896.1
2.5°	893.1	885.5	871.8	862.7	850.6	847.5	841.5	833.9	832.3	824.7	826.3
5°	877.9	865.8	841.5	824.7	805.0	798.9	788.3	780.7	774.6	764.0	765.5
7.5°	874.9	856.6	823.2	791.3	759.4	736.6	704.8	678.9	657.7	634.9	639.4
10°	885.5	862.7	815.6	771.6	713.9	641.0	557.4	502.7	475.4	448.1	451.1
12.5°	906.8	879.4	818.7	751.8	634.9	510.3	394.9	320.5	300.7	288.6	290.1
15°	938.7	905.2	827.8	713.9	528.6	369.1	262.8	230.9	238.5	243.0	243.0
17.5°	972.1	934.1	835.4	645.5	408.6	258.2	214.2	211.1	221.8	232.4	232.4
20°	1013.1	964.5	836.9	558.9	294.7	209.6	202.0	202.0	209.6	221.8	221.8
22.5°	1052.6	997.9	823.2	460.2	224.8	194.4	194.4	194.4	199.0	211.1	212.6
25°	1099.7	1038.9	794.4	355.4	192.9	185.3	185.3	186.8	189.9	200.5	202.0
27.5°	1149.8	1081.4	745.8	259.7	176.2	174.7	176.2	177.7	179.2	189.9	192.9
30°	1207.5	1128.5	683.5	194.4	161.0	161.0	165.6	168.6	168.6	177.7	180.7
32.5°	1274.3	1190.8	609.1	161.0	145.8	144.3	151.9	156.4	156.4	164.0	167.1
35°	1357.9	1254.6	519.5	142.8	133.7	130.6	133.7	141.3	144.3	150.4	151.9
37.5°	1468.7	1330.5	423.8	132.1	124.5	118.5	118.5	120.0	126.1	132.1	133.7
40°	1610.0	1414.1	329.6	124.5	115.4	109.4	104.8	103.3	101.8	106.3	109.4
42.5°	1787.7	1508.2	246.1	117.0	107.8	98.7	92.7	86.6	79.0	77.5	79.0
45°	2015.5	1623.7	182.3	110.9	103.3	89.6	79.0	68.3	54.7	50.1	51.6
47.5°	2284.4	1743.7	142.8	104.8	100.2	79.0	65.3	47.1	33.4	30.4	31.9
50°	2569.9	1859.1	121.5	97.2	94.2	68.3	47.1	28.9	19.7	19.7	21.3
52.5°	2812.9	1924.4	110.9	91.1	85.1	56.2	30.4	16.7	12.2	12.2	13.7
55°	3048.4	1959.3	103.3	85.1	72.9	39.5	16.7	10.6	7.6	7.6	7.6
57.5°	3291.4	1974.5	94.2	77.5	57.7	24.3	9.1	6.1	4.6	4.6	4.6
60°	3507.1	1945.7	80.5	63.8	38.0	12.2	4.6	4.6	3.0	1.5	1.5
62.5°	3687.8	1891.0	56.2	45.6	22.8	6.1	3.0	1.5	0.0	0.0	0.0
65°	3798.7	1802.9	36.5	30.4	13.7	4.6	1.5	0.0	0.0	0.0	0.0
67.5°	3766.8	1637.3	22.8	19.7	6.1	3.0	1.5	0.0	0.0	0.0	0.0
70°	3399.2	1342.7	16.7	12.2	4.6	1.5	0.0	0.0	0.0	0.0	0.0
72.5°	2449.9	908.3	12.2	7.6	3.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	1178.6	323.5	7.6	6.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	288.6	71.4	4.6	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	63.8	13.7	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	21.3	6.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.6	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.6	1.5	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)