

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: P231214

Luminaire Tested: **ARCH-M-AF48-130-D-U-T3-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231214
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-130-D-U-T3-7030-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 845mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10745 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 131
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

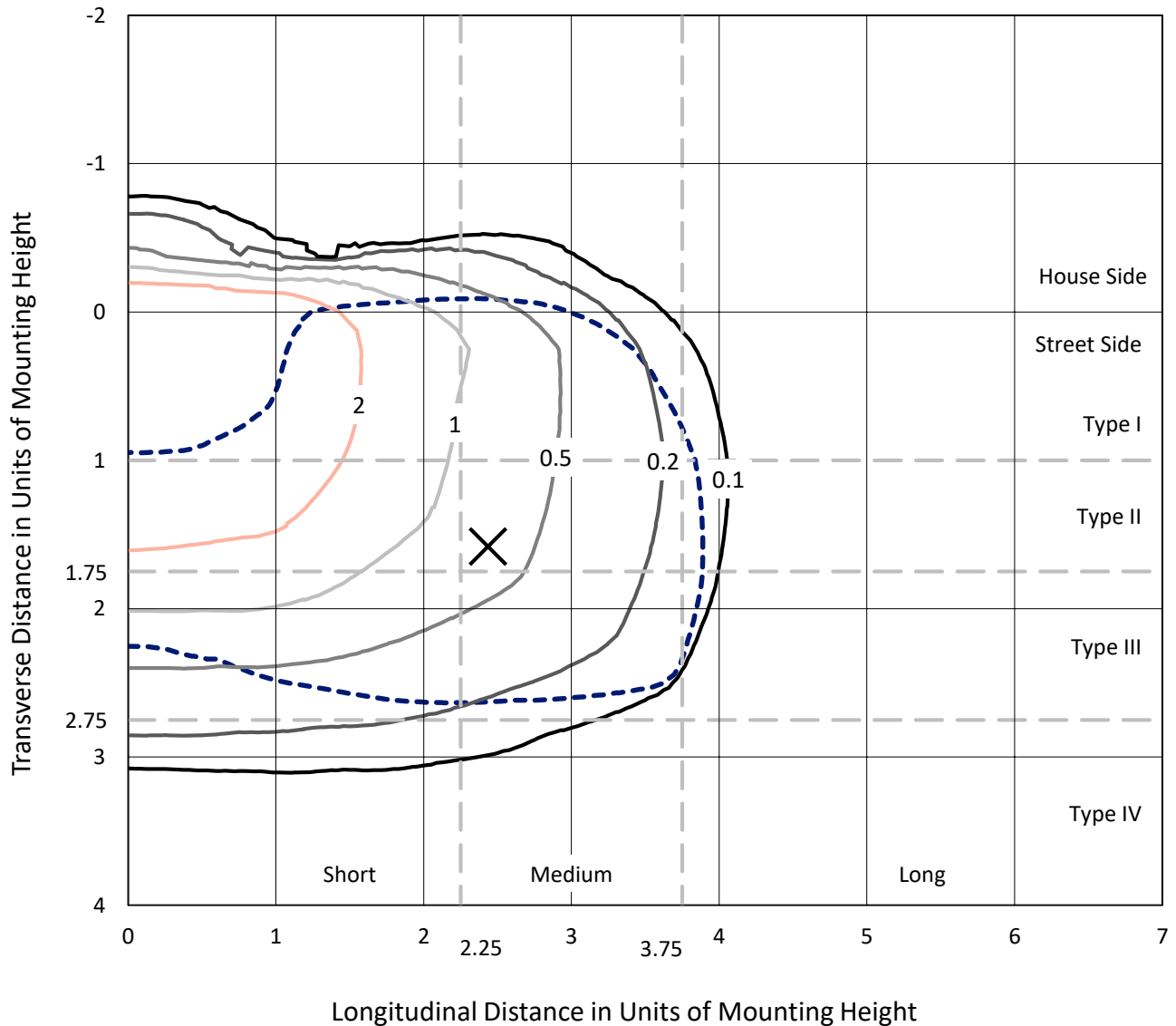


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

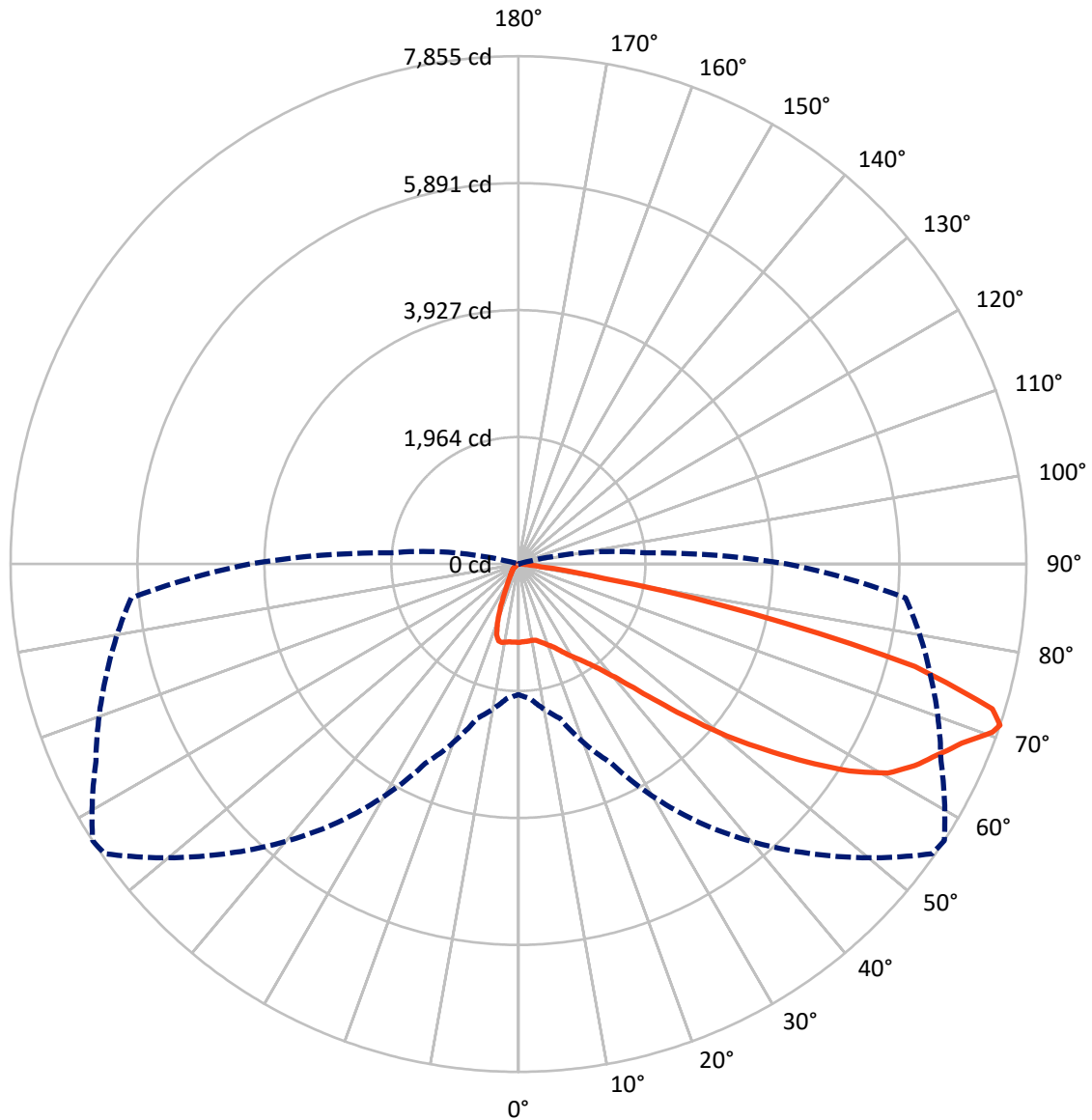


Based on 20 foot mounting height. Maximum calculated value = 3.8 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical



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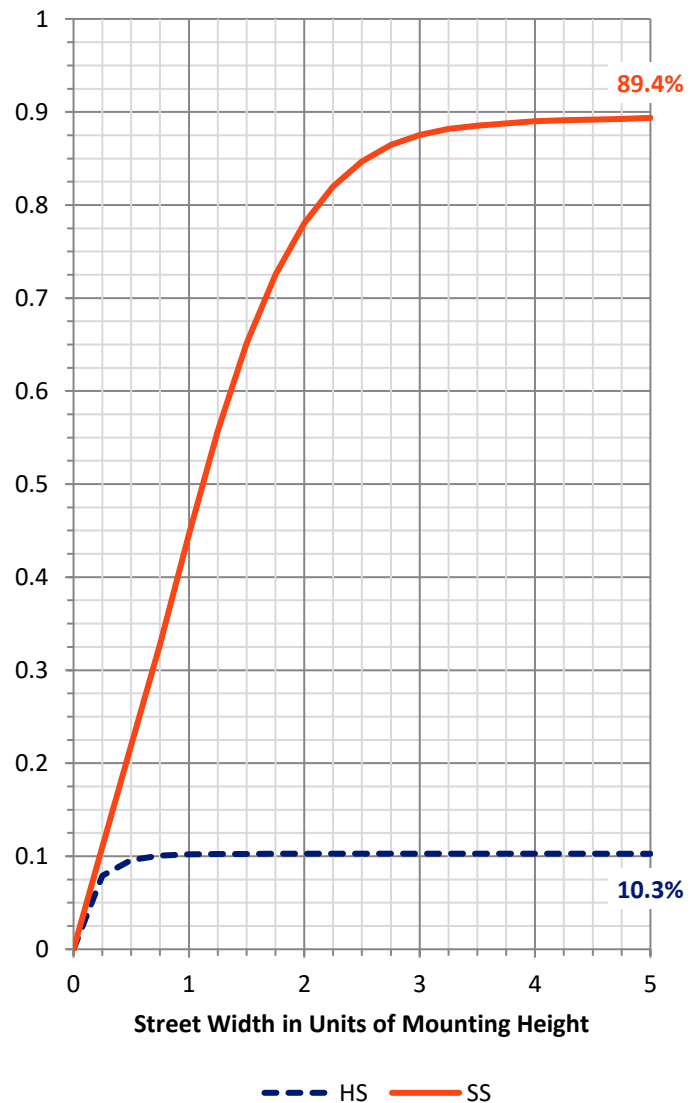
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1113.5	0.0	1113.5
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	9631.5	0.0	9631.5
	% Fixture	89.6	0.0	89.6
Total	Lumens	10745.0	0.0	10745.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.0	1.1
10°-20°	304.9	2.8
20°-30°	475.7	4.4
30°-40°	804.0	7.5
40°-50°	1561.5	14.5
50°-60°	2622.3	24.4
60°-70°	3129.5	29.1
70°-80°	1649.3	15.3
80°-90°	83.8	0.8
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°	10745.0	100.0
0°-180°	10745.0	100.0

Coefficient of Utilization



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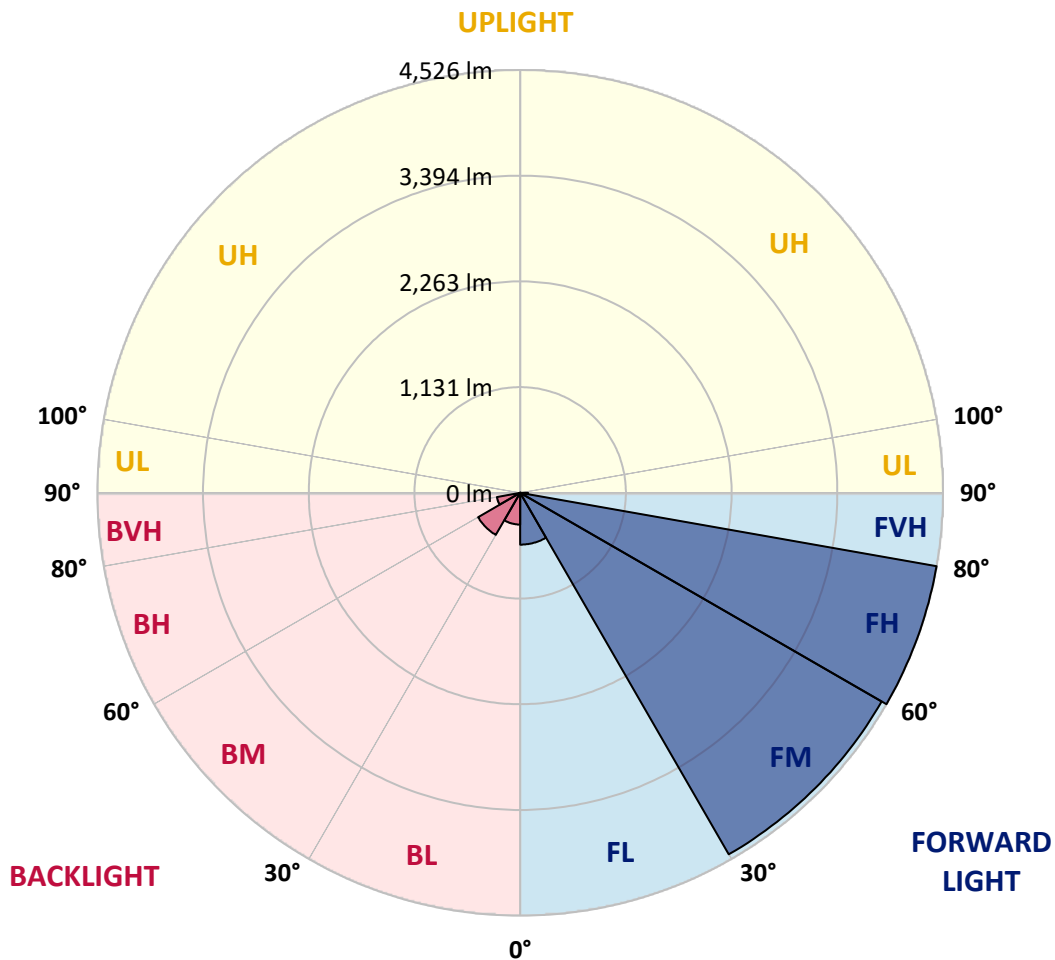
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	554.7	5.2			
FM	(30°-60°)	4467.9	41.6			
FH	(60°-80°)	4525.9	42.1			G2/5000
FVH	(80°-90°)	83.0	0.8			G1/100
BL	(0°-30°)	339.9	3.2	B1/500		
BM	(30°-60°)	519.9	4.8	B1/1000		
BH	(60°-80°)	252.9	2.4	B1/500		G1/500
BVH	(80°-90°)	0.8	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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3
2.5°	1196.8	1196.8	1196.8	1199.3	1201.8	1201.8	1206.8	1204.3	1204.3	1204.3	1209.3
5°	1164.3	1166.8	1169.3	1174.3	1184.3	1191.8	1204.3	1204.3	1206.8	1211.8	1214.3
7.5°	1119.2	1121.7	1129.2	1139.2	1159.3	1176.8	1196.8	1201.8	1209.3	1221.9	1226.9
10°	1091.7	1096.7	1106.7	1119.2	1141.7	1164.3	1189.3	1196.8	1219.4	1241.9	1254.4
12.5°	1084.1	1086.7	1096.7	1116.7	1144.2	1171.8	1204.3	1211.8	1244.4	1279.4	1299.5
15°	1096.7	1099.2	1104.2	1126.7	1159.3	1194.3	1236.9	1246.9	1287.0	1327.0	1352.1
17.5°	1119.2	1119.2	1124.2	1144.2	1179.3	1219.4	1274.4	1289.5	1334.5	1379.6	1407.1
20°	1134.2	1134.2	1141.7	1161.8	1201.8	1254.4	1319.5	1339.5	1389.6	1439.7	1464.7
22.5°	1149.2	1151.8	1159.3	1181.8	1226.9	1299.5	1374.6	1394.6	1452.2	1504.8	1529.8
25°	1191.8	1189.3	1191.8	1211.8	1264.4	1354.6	1449.7	1474.7	1534.8	1592.4	1604.9
27.5°	1309.5	1304.5	1271.9	1259.4	1299.5	1412.1	1544.9	1569.9	1640.0	1697.6	1697.6
30°	1579.9	1569.9	1489.8	1387.1	1354.6	1464.7	1635.0	1670.0	1760.2	1810.3	1795.2
32.5°	1922.9	1900.4	1797.7	1622.5	1492.3	1534.8	1730.1	1770.2	1885.4	1927.9	1895.4
35°	2298.5	2296.0	2168.3	1943.0	1757.7	1680.1	1852.8	1900.4	2045.6	2083.2	2030.6
37.5°	2696.6	2706.6	2621.5	2311.0	2093.2	1917.9	2015.6	2070.7	2248.4	2293.5	2243.4
40°	3139.8	3137.3	3104.7	2736.7	2496.3	2255.9	2250.9	2301.0	2516.3	2586.4	2516.3
42.5°	3700.6	3695.6	3577.9	3247.4	2984.5	2696.6	2593.9	2611.5	2851.8	2967.0	2864.4
45°	4271.5	4236.4	4101.2	3815.8	3583.0	3242.4	3047.1	3047.1	3252.4	3410.2	3249.9
47.5°	4589.5	4554.4	4499.3	4341.6	4271.5	3890.9	3603.0	3567.9	3728.2	3888.4	3663.1
50°	5007.6	5007.6	4869.9	4809.8	4930.0	4662.1	4216.4	4181.4	4259.0	4386.7	4091.2
52.5°	5338.1	5278.0	5180.4	5233.0	5576.0	5453.3	4829.8	4762.2	4822.3	4854.9	4464.3
55°	5475.8	5418.2	5410.7	5603.5	6134.3	5964.1	5458.3	5398.2	5393.2	5233.0	4789.8
57.5°	5503.4	5453.3	5548.4	5886.5	6677.7	6382.2	6084.3	6039.2	5899.0	5498.4	5122.8
60°	5270.5	5295.6	5525.9	6041.7	6998.1	6745.3	6612.6	6565.0	6242.0	5723.7	5493.4
62.5°	4792.3	4852.4	5283.0	6056.7	6880.5	6893.0	6905.5	6873.0	6507.4	5929.0	5866.4
65°	4226.4	4244.0	4762.2	5848.9	6675.2	6847.9	7120.8	7118.3	6710.2	6159.4	6287.1
67.5°	3482.8	3512.8	3961.0	5147.8	6264.5	6827.9	7403.8	7396.3	6940.6	6422.3	6537.4
70°	2591.4	2629.0	2992.1	4003.6	5348.1	6577.5	7774.3	7779.3	7183.4	6622.6	6364.7
71°	2020.6	2088.2	2468.8	3400.2	4879.9	6324.6	7809.4	7854.5	7211.0	6595.0	6009.1
72.5°	991.5	1071.6	1549.9	2393.6	4016.1	5758.8	7579.0	7666.7	7038.2	6252.0	5137.8
75°	257.9	272.9	463.2	979.0	2153.3	3815.8	6111.8	6334.6	5753.8	4759.7	3139.8
77.5°	162.7	167.8	217.8	380.6	806.2	1449.7	3590.5	3700.6	3287.5	2411.2	1106.7
80°	115.2	117.7	137.7	245.4	470.7	423.1	1292.0	1339.5	1189.3	638.5	197.8
82.5°	70.1	70.1	100.2	157.7	290.4	230.4	340.5	363.1	320.5	177.8	65.1
85°	40.1	42.6	62.6	107.7	137.7	112.7	127.7	135.2	137.7	117.7	27.5
87.5°	32.5	35.1	55.1	90.1	75.1	55.1	55.1	57.6	60.1	70.1	12.5
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°	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3	1214.3
2.5°	1209.3	1209.3	1211.8	1209.3	1209.3	1209.3	1211.8	1211.8	1211.8	1216.9	1219.4
5°	1214.3	1214.3	1214.3	1211.8	1209.3	1209.3	1214.3	1216.9	1216.9	1224.4	1224.4
7.5°	1226.9	1226.9	1221.9	1216.9	1211.8	1204.3	1206.8	1209.3	1206.8	1209.3	1209.3
10°	1254.4	1254.4	1246.9	1236.9	1221.9	1199.3	1169.3	1131.7	1096.7	1084.1	1079.1
12.5°	1299.5	1297.0	1282.0	1264.4	1231.9	1154.3	1041.6	908.9	798.7	768.7	758.7
15°	1349.6	1344.5	1327.0	1297.0	1209.3	1004.0	768.7	598.4	493.3	468.2	463.2
17.5°	1402.1	1394.6	1369.6	1309.5	1106.7	746.1	495.8	375.6	318.0	313.0	315.5
20°	1457.2	1447.2	1412.1	1284.5	893.9	498.3	320.5	290.4	285.4	285.4	287.9
22.5°	1519.8	1507.3	1459.7	1194.3	651.0	330.5	275.4	272.9	270.4	267.9	267.9
25°	1592.4	1577.4	1504.8	1031.6	448.2	270.4	262.9	255.4	250.4	245.4	242.9
27.5°	1680.1	1660.0	1539.8	831.3	308.0	252.9	247.9	235.4	225.3	215.3	215.3
30°	1767.7	1742.7	1529.8	626.0	250.4	235.4	225.3	210.3	195.3	185.3	182.8
32.5°	1860.3	1835.3	1464.7	420.6	227.8	215.3	202.8	180.3	162.7	150.2	147.7
35°	1998.0	1978.0	1337.0	277.9	205.3	190.3	172.8	150.2	127.7	115.2	112.7
37.5°	2203.4	2178.3	1179.3	212.8	180.3	157.7	142.7	117.7	95.1	82.6	80.1
40°	2478.8	2403.7	991.5	187.8	157.7	130.2	110.2	85.1	67.6	60.1	60.1
42.5°	2799.3	2621.5	788.7	170.3	140.2	107.7	80.1	57.6	47.6	45.1	45.1
45°	3139.8	2824.3	585.9	157.7	122.7	85.1	57.6	40.1	35.1	32.5	32.5
47.5°	3490.3	2989.5	408.1	142.7	102.7	65.1	40.1	30.0	25.0	22.5	22.5
50°	3818.3	3097.2	287.9	127.7	87.6	47.6	30.0	22.5	17.5	17.5	17.5
52.5°	4046.2	3087.2	207.8	110.2	67.6	32.5	20.0	15.0	15.0	15.0	15.0
55°	4246.5	3049.6	162.7	95.1	52.6	22.5	15.0	12.5	12.5	10.0	10.0
57.5°	4416.7	2989.5	137.7	77.6	37.6	17.5	10.0	10.0	7.5	7.5	7.5
60°	4561.9	2914.4	115.2	65.1	25.0	12.5	7.5	5.0	5.0	2.5	5.0
62.5°	4759.7	2866.9	100.2	50.1	17.5	7.5	5.0	2.5	2.5	0.0	0.0
65°	4905.0	2776.7	85.1	35.1	10.0	5.0	2.5	2.5	0.0	0.0	0.0
67.5°	4910.0	2614.0	62.6	20.0	7.5	5.0	2.5	0.0	0.0	0.0	0.0
70°	4514.4	2228.4	40.1	10.0	5.0	2.5	2.5	0.0	0.0	0.0	0.0
71°	4151.3	1973.0	32.5	7.5	5.0	2.5	0.0	0.0	0.0	0.0	0.0
72.5°	3420.2	1449.7	25.0	7.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0
75°	1885.4	525.8	12.5	5.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	603.4	160.2	7.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	102.7	25.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	35.1	10.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.0	2.5	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)