

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: P237202

Luminaire Tested: **ARCH-L-AF72-90-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237202
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-L-AF72-90-D-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 400mA 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: 9767.1 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

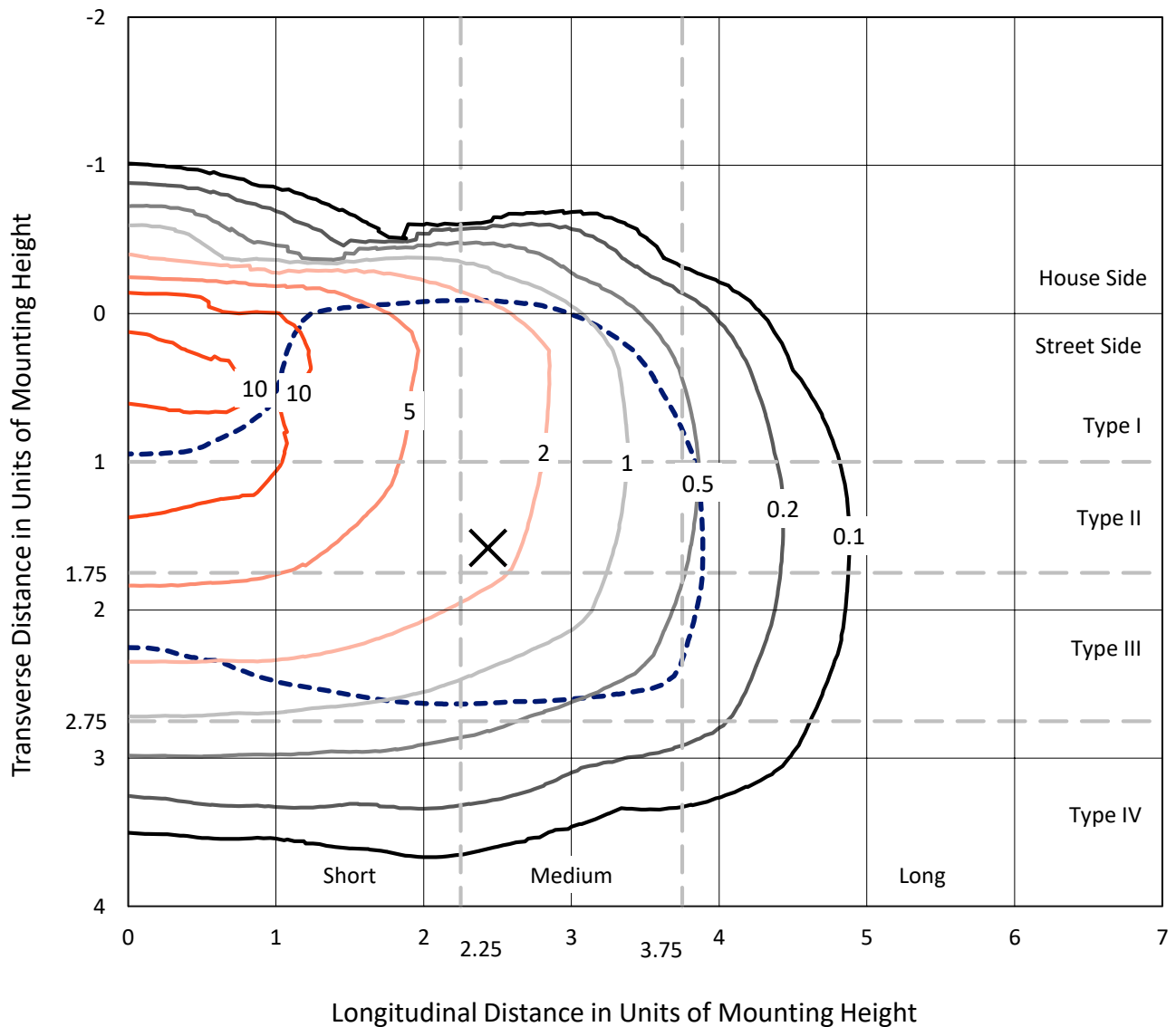
Input Watts (W): 93
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

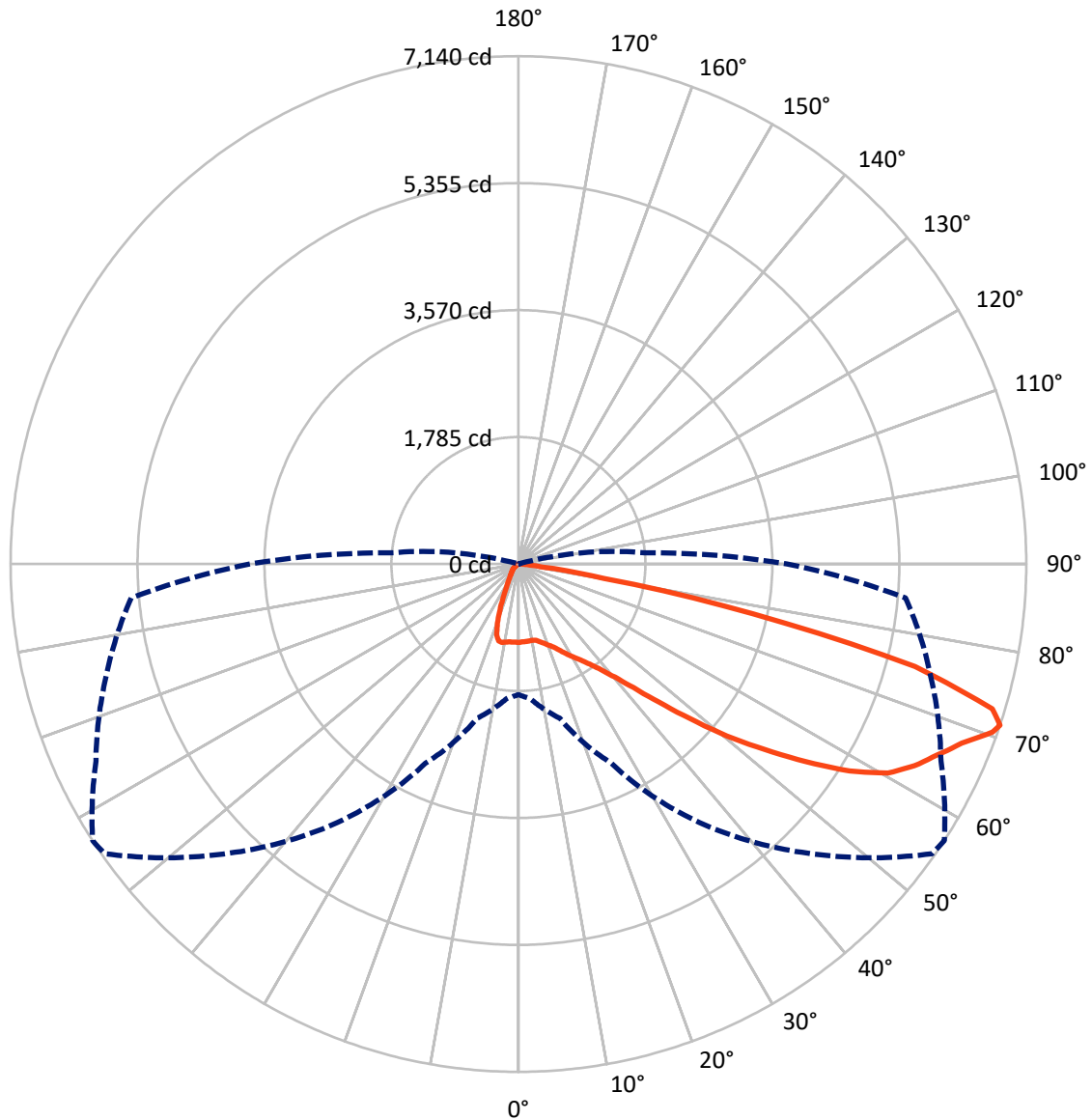
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.7 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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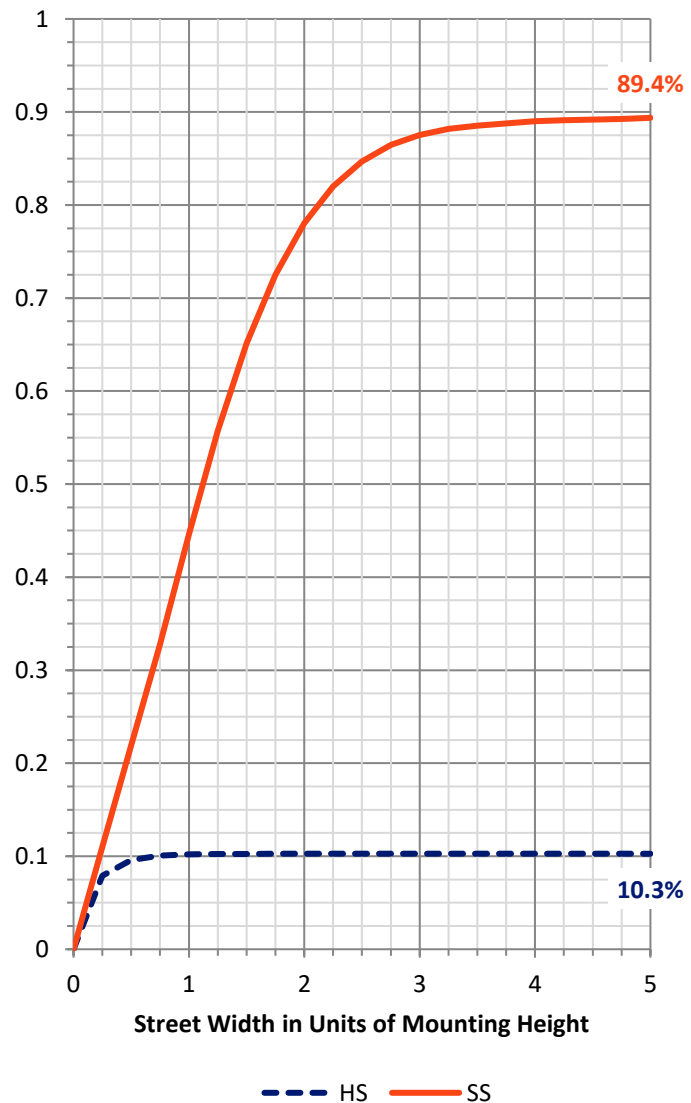
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1012.2	0.0	1012.2
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	8754.9	0.0	8754.9
	% Fixture	89.6	0.0	89.6
Total	Lumens	9767.1	0.0	9767.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.7	1.1
10°-20°	277.2	2.8
20°-30°	432.4	4.4
30°-40°	730.8	7.5
40°-50°	1419.4	14.5
50°-60°	2383.7	24.4
60°-70°	2844.7	29.1
70°-80°	1499.2	15.3
80°-90°	76.2	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°	9767.1	100.0
0°-180°	9767.1	100.0



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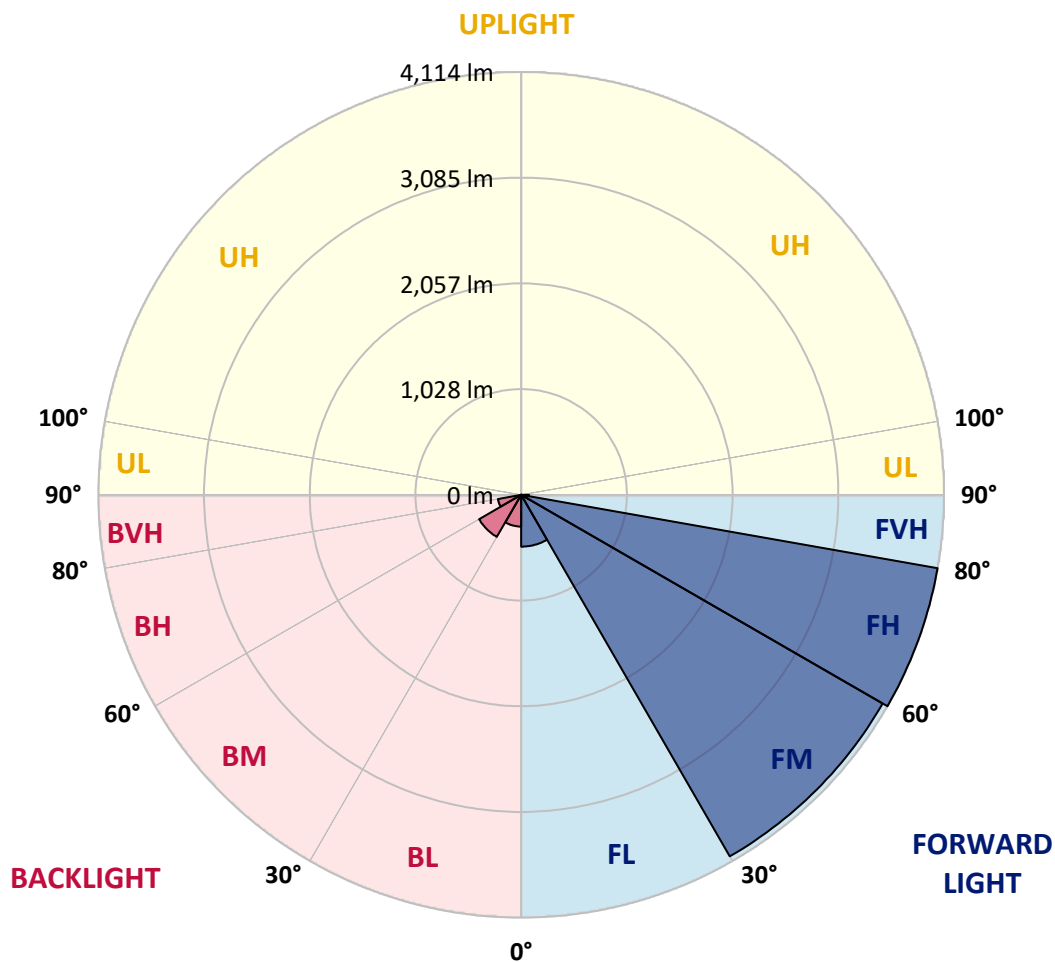
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	504.3	5.2			
FM	(30°-60°)	4061.3	41.6			
FH	(60°-80°)	4114.0	42.1			G2/5000
FVH	(80°-90°)	75.4	0.8			G1/100
BL	(0°-30°)	309.0	3.2	B1/500		
BM	(30°-60°)	472.6	4.8	B1/1000		
BH	(60°-80°)	229.9	2.4	B1/500		G1/500
BVH	(80°-90°)	0.7	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°	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9
2.5°	1087.9	1087.9	1087.9	1090.2	1092.4	1092.4	1097.0	1094.8	1094.8	1094.8	1099.3
5°	1058.3	1060.6	1062.8	1067.4	1076.6	1083.3	1094.8	1094.8	1097.0	1101.5	1103.9
7.5°	1017.3	1019.6	1026.4	1035.5	1053.7	1069.7	1087.9	1092.4	1099.3	1110.6	1115.2
10°	992.3	996.9	1006.0	1017.3	1037.8	1058.3	1081.1	1087.9	1108.4	1128.8	1140.3
12.5°	985.5	987.8	996.9	1015.1	1040.1	1065.1	1094.8	1101.5	1131.2	1163.0	1181.2
15°	996.9	999.1	1003.7	1024.2	1053.7	1085.7	1124.3	1133.4	1169.8	1206.3	1229.0
17.5°	1017.3	1017.3	1021.9	1040.1	1072.0	1108.4	1158.5	1172.1	1213.1	1254.0	1279.1
20°	1031.0	1031.0	1037.8	1056.0	1092.4	1140.3	1199.4	1217.6	1263.1	1308.7	1331.5
22.5°	1044.6	1046.9	1053.7	1074.2	1115.2	1181.2	1249.5	1267.7	1320.0	1367.9	1390.6
25°	1083.3	1081.1	1083.3	1101.5	1149.4	1231.3	1317.8	1340.6	1395.2	1447.5	1458.9
27.5°	1190.3	1185.8	1156.1	1144.8	1181.2	1283.6	1404.3	1427.0	1490.7	1543.1	1543.1
30°	1436.1	1427.0	1354.2	1260.9	1231.3	1331.5	1486.1	1518.1	1600.0	1645.5	1631.8
32.5°	1747.9	1727.5	1634.2	1474.8	1356.4	1395.2	1572.7	1609.1	1713.7	1752.5	1722.9
35°	2089.3	2087.0	1970.9	1766.1	1597.7	1527.2	1684.2	1727.5	1859.4	1893.6	1845.8
37.5°	2451.2	2460.3	2383.0	2100.7	1902.7	1743.4	1832.1	1882.2	2043.8	2084.8	2039.3
40°	2854.0	2851.8	2822.2	2487.6	2269.1	2050.6	2046.1	2091.6	2287.3	2351.0	2287.3
42.5°	3363.9	3359.3	3252.4	2951.9	2713.0	2451.2	2357.9	2373.9	2592.3	2697.0	2603.7
45°	3882.8	3850.9	3728.0	3468.5	3256.9	2947.3	2769.8	2769.8	2956.4	3099.8	2954.2
47.5°	4171.8	4140.0	4089.9	3946.4	3882.8	3536.9	3275.1	3243.3	3388.9	3534.5	3329.7
50°	4551.9	4551.9	4426.7	4372.1	4481.3	4237.8	3832.7	3800.9	3871.4	3987.5	3718.9
52.5°	4852.4	4797.7	4708.9	4756.7	5068.5	4957.0	4390.3	4328.8	4383.4	4413.1	4058.0
55°	4977.5	4925.1	4918.3	5093.6	5576.1	5421.3	4961.5	4907.0	4902.4	4756.7	4353.9
57.5°	5002.5	4957.0	5043.5	5350.7	6070.0	5801.4	5530.6	5489.6	5362.1	4997.9	4656.6
60°	4790.9	4813.6	5023.0	5491.8	6361.3	6131.4	6010.8	5967.5	5673.9	5202.8	4993.4
62.5°	4356.1	4410.8	4802.2	5505.5	6254.3	6265.7	6277.0	6247.5	5915.2	5389.4	5332.5
65°	3841.8	3857.8	4328.8	5316.6	6067.6	6224.8	6472.8	6470.5	6099.5	5598.8	5714.9
67.5°	3165.8	3193.1	3600.6	4679.4	5694.5	6206.5	6730.0	6723.1	6308.9	5837.8	5942.5
70°	2355.7	2389.7	2719.7	3639.2	4861.5	5978.9	7066.9	7071.4	6529.7	6019.9	5785.5
71°	1836.7	1898.2	2244.0	3090.7	4435.8	5749.1	7098.7	7139.7	6554.8	5994.8	5462.3
72.5°	901.3	974.2	1408.8	2175.8	3650.6	5234.6	6889.3	6969.0	6397.6	5683.0	4670.3
75°	234.5	248.1	421.0	889.9	1957.3	3468.5	5555.5	5758.2	5230.1	4326.6	2854.0
77.5°	147.9	152.5	198.0	346.0	732.8	1317.8	3263.7	3363.9	2988.3	2191.8	1006.0
80°	104.6	107.0	125.2	223.0	427.9	384.6	1174.3	1217.6	1081.1	580.3	179.8
82.5°	63.7	63.7	91.0	143.4	264.0	209.4	309.5	330.0	291.3	161.6	59.1
85°	36.4	38.7	56.9	97.9	125.2	102.4	116.1	122.9	125.2	107.0	25.1
87.5°	29.6	31.8	50.0	81.9	68.2	50.0	50.0	52.4	54.6	63.7	11.4
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°	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9	1103.9
2.5°	1099.3	1099.3	1101.5	1099.3	1099.3	1099.3	1101.5	1101.5	1101.5	1106.1	1108.4
5°	1103.9	1103.9	1103.9	1101.5	1099.3	1099.3	1103.9	1106.1	1106.1	1113.0	1113.0
7.5°	1115.2	1115.2	1110.6	1106.1	1101.5	1094.8	1097.0	1099.3	1097.0	1099.3	1099.3
10°	1140.3	1140.3	1133.4	1124.3	1110.6	1090.2	1062.8	1028.7	996.9	985.5	980.9
12.5°	1181.2	1179.0	1165.2	1149.4	1119.7	1049.2	946.8	826.1	726.0	698.7	689.6
15°	1226.7	1222.2	1206.3	1179.0	1099.3	912.7	698.7	543.9	448.4	425.6	421.0
17.5°	1274.5	1267.7	1244.9	1190.3	1006.0	678.2	450.6	341.4	289.1	284.5	286.7
20°	1324.6	1315.5	1283.6	1167.6	812.5	453.0	291.3	264.0	259.4	259.4	261.8
22.5°	1381.5	1370.1	1326.9	1085.7	591.8	300.4	250.3	248.1	245.8	243.6	243.6
25°	1447.5	1433.9	1367.9	937.7	407.4	245.8	239.0	232.1	227.6	223.0	220.8
27.5°	1527.2	1509.0	1399.7	755.7	280.0	229.9	225.4	213.9	204.8	195.7	195.7
30°	1606.9	1584.0	1390.6	569.0	227.6	213.9	204.8	191.2	177.5	168.4	166.1
32.5°	1691.0	1668.2	1331.5	382.4	207.1	195.7	184.3	163.9	147.9	136.6	134.3
35°	1816.2	1798.0	1215.4	252.7	186.6	173.0	157.0	136.6	116.1	104.6	102.4
37.5°	2002.8	1980.0	1072.0	193.4	163.9	143.4	129.7	107.0	86.4	75.1	72.8
40°	2253.2	2184.9	901.3	170.7	143.4	118.4	100.1	77.3	61.5	54.6	54.6
42.5°	2544.5	2383.0	716.9	154.8	127.5	97.9	72.8	52.4	43.3	40.9	40.9
45°	2854.0	2567.3	532.5	143.4	111.5	77.3	52.4	36.4	31.8	29.6	29.6
47.5°	3172.7	2717.5	371.0	129.7	93.3	59.1	36.4	27.3	22.7	20.5	20.5
50°	3470.8	2815.4	261.8	116.1	79.7	43.3	27.3	20.5	16.0	16.0	16.0
52.5°	3677.9	2806.3	188.9	100.1	61.5	29.6	18.2	13.6	13.6	13.6	13.6
55°	3860.0	2772.1	147.9	86.4	47.8	20.5	13.6	11.4	11.4	9.1	9.1
57.5°	4014.8	2717.5	125.2	70.6	34.2	16.0	9.1	9.1	6.9	6.9	6.9
60°	4146.7	2649.2	104.6	59.1	22.7	11.4	6.9	4.5	4.5	2.3	4.5
62.5°	4326.6	2606.0	91.0	45.5	16.0	6.9	4.5	2.3	2.3	0.0	0.0
65°	4458.5	2524.0	77.3	31.8	9.1	4.5	2.3	2.3	0.0	0.0	0.0
67.5°	4463.1	2376.1	56.9	18.2	6.9	4.5	2.3	0.0	0.0	0.0	0.0
70°	4103.6	2025.5	36.4	9.1	4.5	2.3	2.3	0.0	0.0	0.0	0.0
71°	3773.6	1793.4	29.6	6.9	4.5	2.3	0.0	0.0	0.0	0.0	0.0
72.5°	3109.0	1317.8	22.7	6.9	2.3	2.3	0.0	0.0	0.0	0.0	0.0
75°	1713.7	477.9	11.4	4.5	2.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	548.5	145.7	6.9	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	93.3	22.7	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	31.8	9.1	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.1	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.5	2.3	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)