

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: P842625

Luminaire Tested: **ARCH4-70-740-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842625
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-70-740-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 605mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9137 lumens
Efficiency: N/A
Efficacy: 123.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 73.8
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: 24 FT



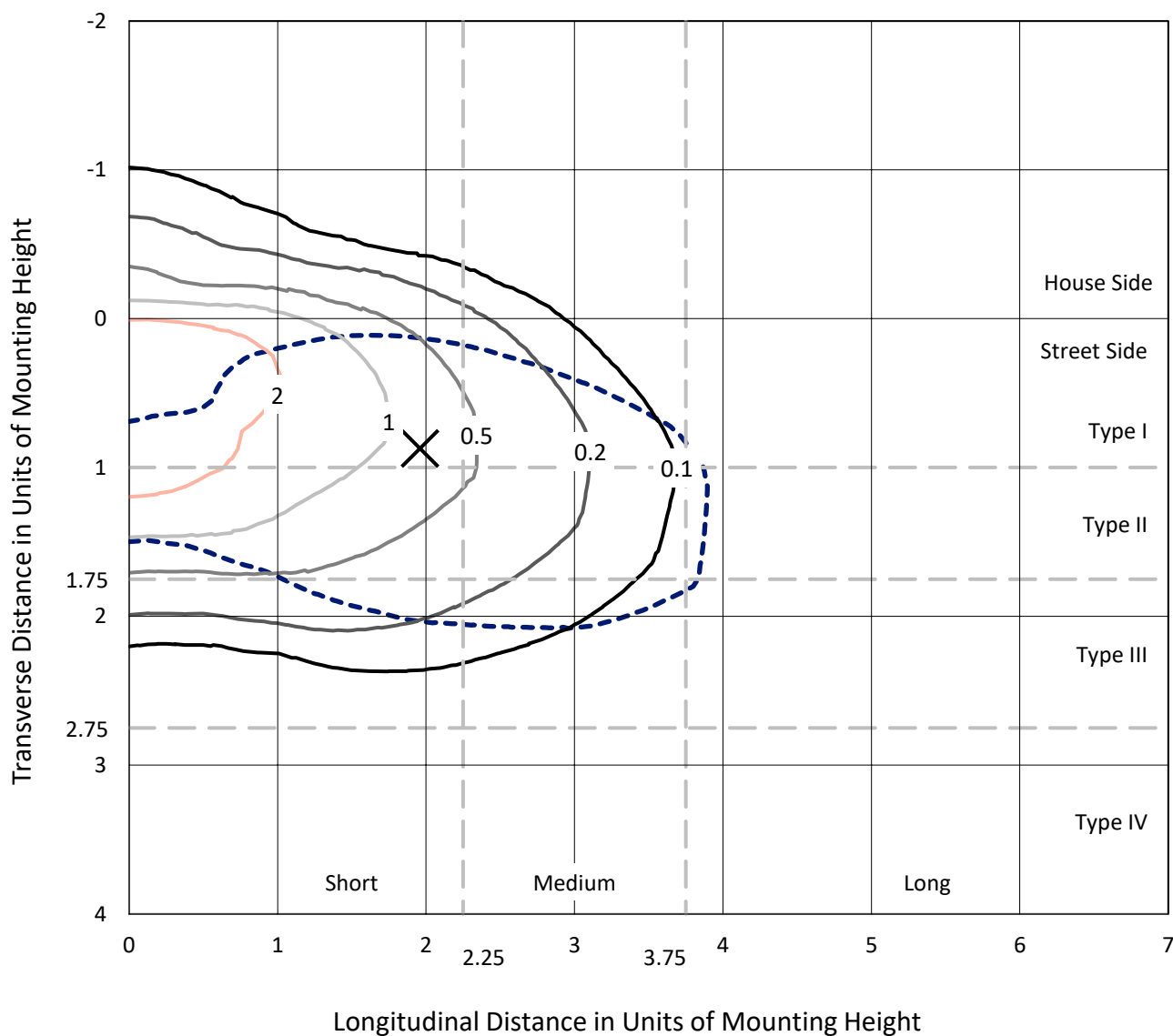
REPORT NUMBER: P842625

CATALOG NUMBER: ARCH4-70-740-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

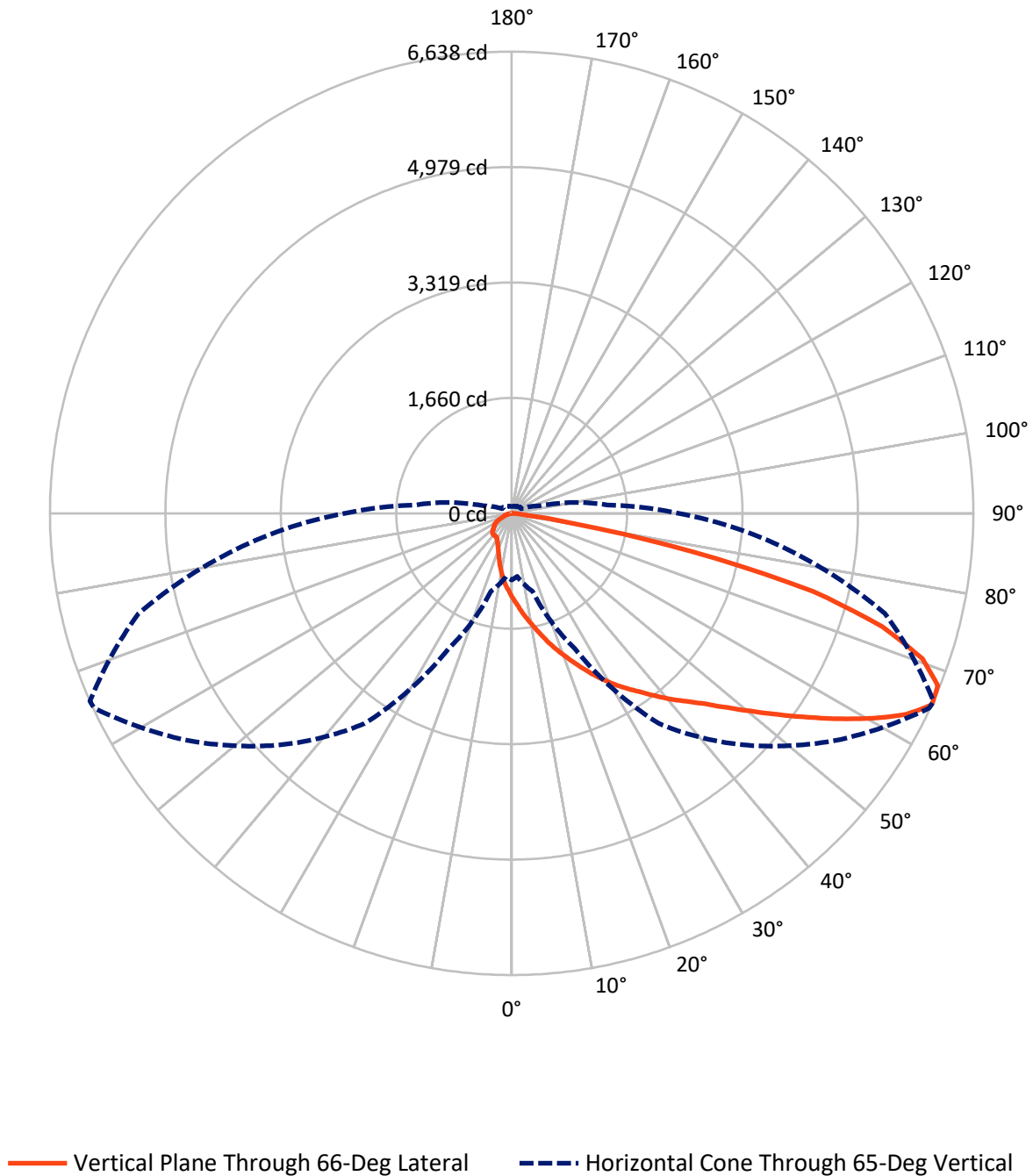


Based on 25 foot mounting height. Maximum calculated value = 3.5 fc

Type III - Short - N/A

REPORT NUMBER: P842625
CATALOG NUMBER: ARCH4-70-740-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P842625

CATALOG NUMBER: ARCH4-70-740-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	966.5	0.0	966.5
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	8170.5	0.0	8170.5
	% Fixture	89.4	0.0	89.4
Total	Lumens	9137.0	0.0	9137.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.4	1.3
10°-20°	389.0	4.3
20°-30°	703.8	7.7
30°-40°	1100.6	12.0
40°-50°	1669.6	18.3
50°-60°	2121.3	23.2
60°-70°	1982.1	21.7
70°-80°	985.1	10.8
80°-90°	66.2	0.7
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°	9137.0	100.0
0°-180°	9137.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842625

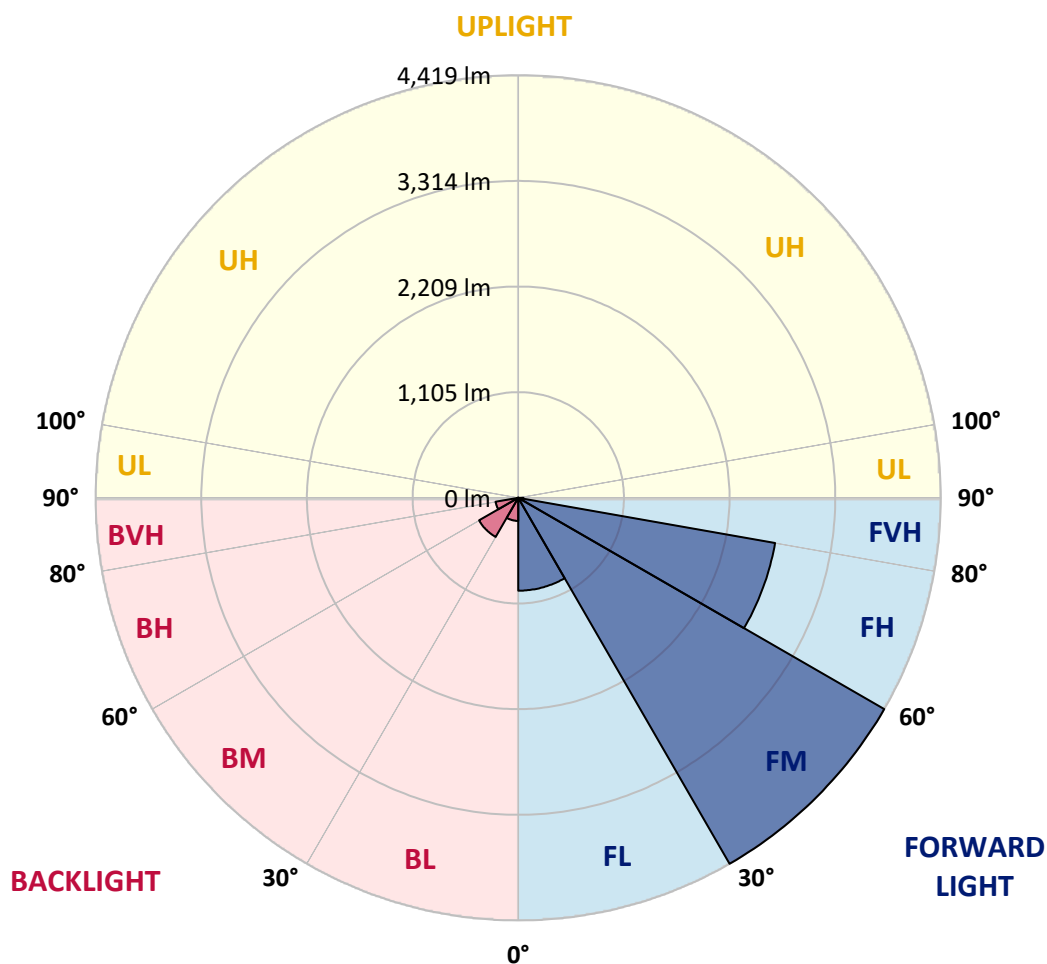
CATALOG NUMBER: ARCH4-70-740-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	970.8	10.6			
FM	(30°-60°)	4418.8	48.4			
FH	(60°-80°)	2726.5	29.8			G2/5000
FVH	(80°-90°)	54.5	0.6			G1/100
BL	(0°-30°)	241.4	2.6	B1/500		
BM	(30°-60°)	472.7	5.2	B1/1000		
BH	(60°-80°)	240.7	2.6	B1/500		G1/500
BVH	(80°-90°)	11.7	0.1			G1/100
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 Short



REPORT NUMBER: P842625

CATALOG NUMBER: ARCH4-70-740-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2
2.5°	1412.4	1423.9	1429.6	1431.5	1387.5	1368.3	1349.1	1305.1	1295.5	1270.6	1238.0
5°	1661.5	1676.8	1673.0	1665.3	1611.7	1550.3	1500.5	1418.1	1404.7	1345.3	1272.5
7.5°	1906.8	1920.2	1916.4	1887.6	1828.2	1742.0	1659.6	1538.8	1519.7	1423.9	1307.0
10°	2111.8	2123.3	2121.4	2092.7	2021.8	1916.4	1816.7	1655.7	1632.8	1496.7	1335.7
12.5°	2280.5	2295.8	2293.9	2274.7	2211.5	2096.5	1983.4	1789.9	1761.1	1584.8	1376.0
15°	2412.7	2431.9	2431.9	2424.2	2380.1	2284.3	2155.9	1937.5	1903.0	1686.4	1425.8
17.5°	2493.2	2508.5	2521.9	2535.4	2504.7	2431.9	2315.0	2085.0	2048.6	1786.1	1477.5
20°	2535.4	2550.7	2560.3	2589.0	2594.8	2558.4	2466.4	2230.7	2192.3	1899.1	1536.9
22.5°	2604.4	2617.8	2619.7	2644.6	2656.1	2665.7	2608.2	2374.4	2343.7	2023.7	1604.0
25°	2719.3	2734.7	2728.9	2740.4	2742.3	2753.8	2748.1	2539.2	2508.5	2165.5	1684.5
27.5°	2866.9	2886.1	2882.2	2870.7	2853.5	2843.9	2868.8	2705.9	2677.2	2307.3	1766.9
30°	3026.0	3049.0	3043.2	3020.2	2974.2	2934.0	2968.5	2863.1	2836.2	2453.0	1858.9
32.5°	3186.9	3213.8	3211.8	3173.5	3094.9	3026.0	3077.7	3010.6	2991.5	2610.1	1958.5
35°	3292.3	3326.8	3323.0	3300.0	3198.4	3139.0	3202.3	3162.0	3148.6	2801.7	2102.3
37.5°	3462.9	3499.3	3466.7	3409.2	3292.3	3261.7	3338.3	3332.6	3323.0	3004.9	2253.7
40°	3876.8	3930.5	3844.2	3608.5	3416.9	3390.1	3499.3	3522.3	3512.7	3206.1	2389.7
42.5°	4309.9	4390.4	4256.3	3930.5	3643.0	3545.3	3675.6	3708.2	3696.7	3378.6	2512.4
45°	4572.5	4607.0	4472.8	4219.9	4043.5	3733.1	3863.4	3917.1	3907.5	3585.5	2669.5
47.5°	4787.1	4773.7	4620.4	4449.8	4482.4	3997.6	4076.1	4181.5	4173.9	3813.6	2842.0
50°	4833.1	4802.4	4741.1	4633.8	4720.0	4265.8	4300.3	4482.4	4474.7	4066.5	3016.4
52.5°	4509.2	4469.0	4635.7	4725.8	4697.0	4461.3	4547.6	4812.0	4808.2	4340.6	3183.1
55°	3700.5	3667.9	4116.4	4582.0	4672.1	4599.3	4821.6	5155.0	5176.1	4631.9	3334.5
57.5°	2911.0	2876.5	3317.2	4221.8	4580.1	4725.8	5141.6	5547.9	5574.7	4948.1	3478.2
60°	2320.7	2269.0	2606.3	3654.5	4407.7	4823.5	5450.2	5979.1	5982.9	5237.4	3566.4
62.5°	1577.2	1519.7	1893.4	2935.9	4118.3	4838.8	5687.8	6350.9	6366.2	5454.0	3581.7
65°	958.2	910.3	1163.2	2144.4	3690.9	4708.5	5691.6	6624.9	6638.3	5553.7	3489.7
67.5°	555.7	536.6	665.0	1335.7	2981.9	4357.8	5452.1	6582.7	6607.7	5511.5	3280.8
70°	323.9	322.0	369.9	661.1	2104.2	3662.2	4917.4	6228.2	6264.6	5291.1	2960.8
72.5°	237.6	241.5	260.6	354.5	1218.8	2636.9	4164.3	5515.3	5570.9	4859.9	2504.7
75°	187.8	189.7	207.0	241.5	640.1	1490.9	3119.9	4426.8	4470.9	4091.5	1956.6
77.5°	139.9	143.7	157.1	170.6	297.0	684.1	1755.4	2727.0	2654.2	2246.0	944.8
80°	101.6	111.1	116.9	122.6	157.1	264.5	527.0	950.5	942.9	981.2	446.5
82.5°	65.2	72.8	78.6	82.4	93.9	126.5	157.1	212.7	230.0	381.4	178.2
85°	28.7	32.6	36.4	44.1	40.2	44.1	65.2	42.2	36.4	57.5	32.6
87.5°	0.0	0.0	5.7	9.6	7.7	3.8	11.5	7.7	5.7	5.7	5.7
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: P842625

CATALOG NUMBER: ARCH4-70-740-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2
2.5°	1220.7	1199.6	1155.6	1113.4	1088.5	1055.9	1027.2	1000.3	998.4	990.8	977.4
5°	1236.1	1195.8	1113.4	1034.8	975.4	912.2	858.5	816.4	801.0	789.5	774.2
7.5°	1251.4	1188.2	1065.5	950.5	856.6	768.5	705.2	647.7	630.5	615.2	605.6
10°	1257.1	1174.7	1009.9	856.6	734.0	640.1	573.0	530.8	515.5	507.8	502.1
12.5°	1274.4	1167.1	958.2	768.5	626.7	540.4	492.5	467.6	461.8	456.1	450.3
15°	1297.4	1167.1	906.4	682.2	542.3	473.3	444.6	427.4	423.5	421.6	417.8
17.5°	1322.3	1167.1	856.6	609.4	481.0	429.3	408.2	398.6	396.7	394.8	392.9
20°	1356.8	1169.0	803.0	546.2	436.9	396.7	379.4	367.9	366.0	364.1	364.1
22.5°	1391.3	1172.8	751.2	498.3	408.2	371.8	350.7	339.2	335.4	335.4	335.4
25°	1435.4	1184.3	703.3	458.0	383.3	348.8	322.0	312.4	310.5	310.5	308.5
27.5°	1487.1	1197.7	661.1	427.4	358.4	322.0	295.1	285.5	281.7	281.7	279.8
30°	1542.7	1211.1	626.7	404.4	333.4	295.1	270.2	258.7	254.9	256.8	254.9
32.5°	1604.0	1230.3	599.8	389.0	310.5	272.1	249.1	235.7	233.8	233.8	231.9
35°	1707.5	1284.0	596.0	381.4	291.3	254.9	231.9	218.5	216.6	216.6	214.6
37.5°	1818.6	1345.3	613.2	377.5	276.0	239.5	218.5	205.1	203.1	203.1	203.1
40°	1912.5	1391.3	632.4	377.5	266.4	226.1	207.0	195.5	195.5	195.5	195.5
42.5°	1975.8	1395.1	628.6	377.5	258.7	216.6	199.3	187.8	187.8	189.7	187.8
45°	2069.7	1414.3	613.2	371.8	253.0	208.9	191.6	182.1	180.1	182.1	182.1
47.5°	2180.8	1448.8	597.9	348.8	251.0	201.2	185.9	174.4	172.5	174.4	172.5
50°	2286.2	1479.4	590.2	318.1	247.2	193.6	178.2	166.7	164.8	166.7	164.8
52.5°	2374.4	1492.9	576.8	297.0	237.6	185.9	170.6	159.1	155.2	157.1	157.1
55°	2445.3	1489.0	557.7	279.8	220.4	178.2	161.0	151.4	145.6	145.6	143.7
57.5°	2510.4	1490.9	540.4	262.5	201.2	166.7	153.3	141.8	134.1	132.2	130.3
60°	2535.4	1481.4	509.8	239.5	182.1	157.1	143.7	130.3	122.6	120.7	118.8
62.5°	2500.9	1446.9	469.5	199.3	164.8	145.6	134.1	120.7	113.1	111.1	109.2
65°	2403.1	1381.7	408.2	157.1	149.5	132.2	122.6	113.1	103.5	99.7	97.7
67.5°	2236.4	1287.8	331.5	126.5	132.2	120.7	115.0	103.5	92.0	88.2	86.2
70°	1998.8	1163.2	249.1	107.3	116.9	107.3	103.5	92.0	82.4	78.6	76.7
72.5°	1665.3	962.0	174.4	92.0	101.6	93.9	90.1	82.4	72.8	67.1	67.1
75°	1259.1	689.9	115.0	78.6	84.3	80.5	74.7	69.0	63.2	59.4	57.5
77.5°	542.3	268.3	70.9	59.4	69.0	67.1	59.4	55.6	53.7	49.8	49.8
80°	233.8	109.2	44.1	44.1	49.8	47.9	46.0	42.2	42.2	40.2	38.3
82.5°	86.2	44.1	26.8	32.6	36.4	32.6	32.6	32.6	32.6	30.7	30.7
85°	21.1	13.4	13.4	19.2	21.1	19.2	21.1	19.2	19.2	19.2	17.2
87.5°	5.7	5.7	7.7	7.7	7.7	7.7	7.7	5.7	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)