

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: P271359

Luminaire Tested: **XNV2-AF-02-LED-U-T4W-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271359
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24127)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV2-AF-02-LED-U-T4W-7027-800
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8365.2 lumens
Efficiency: N/A
Efficacy: 98.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 85
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

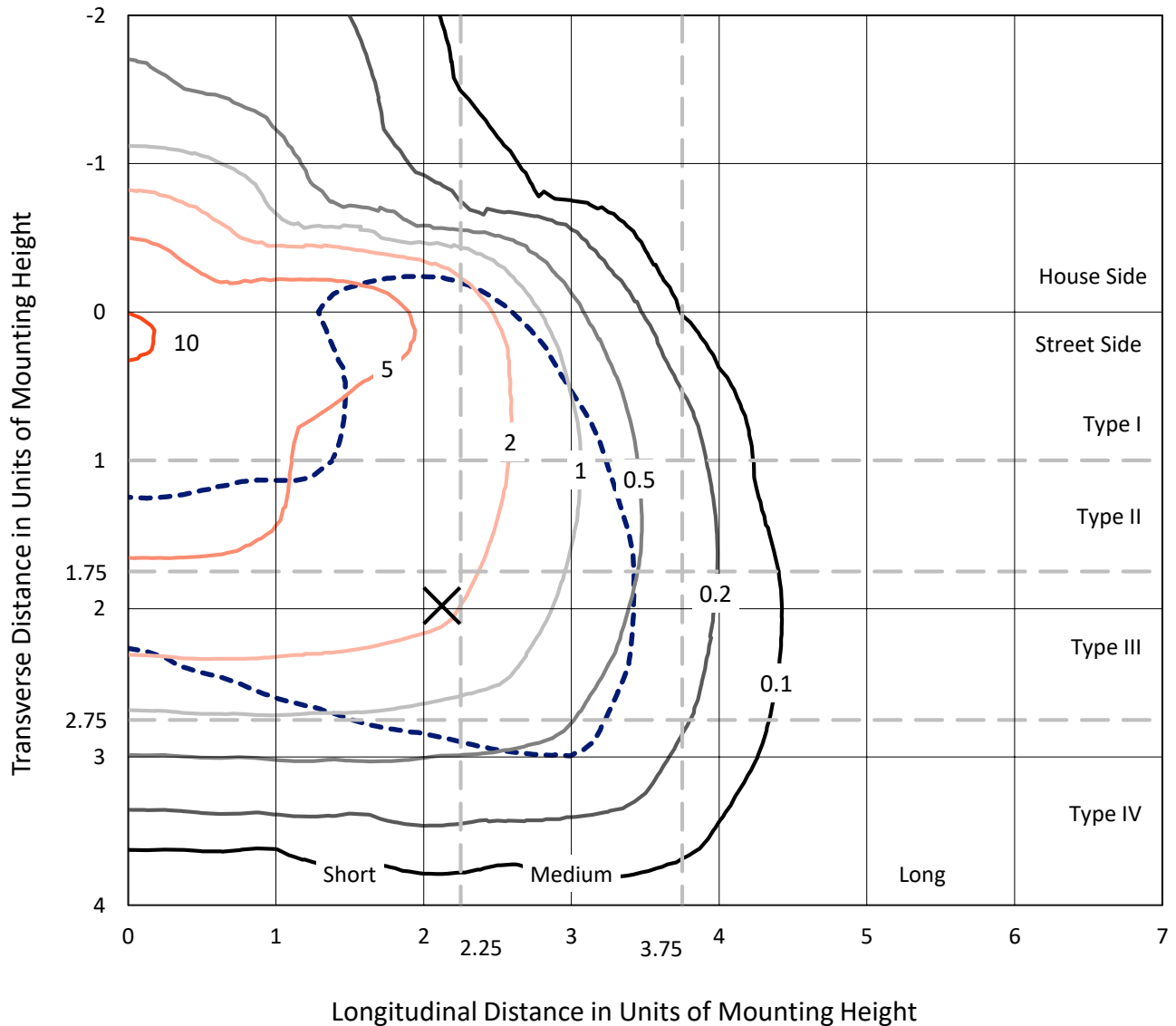


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Iso-Footcandle Lines of Horizontal Illumination

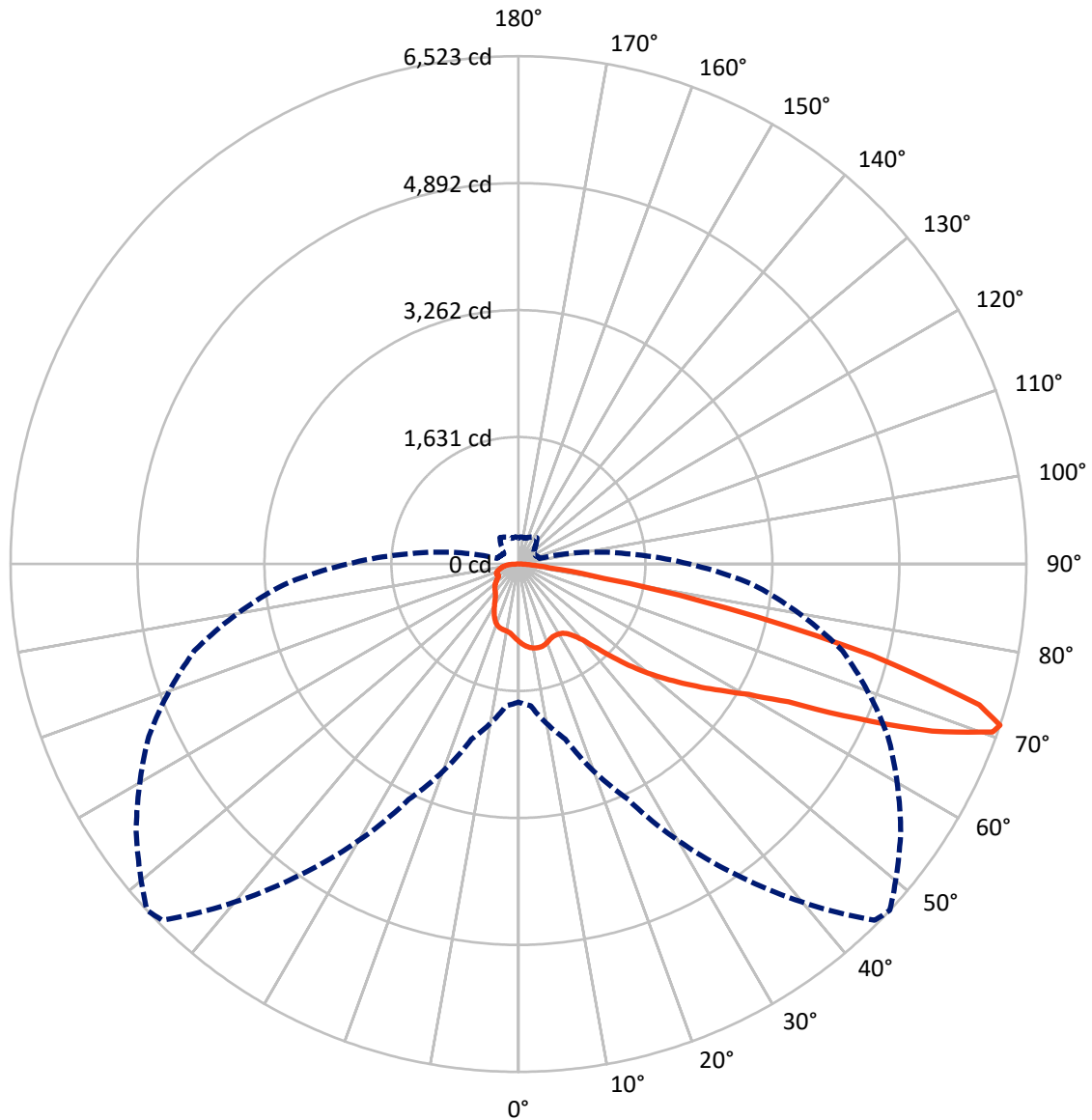
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1792.8	0.0	1792.8
	% Fixture	21.4	0.0	21.4
Street Side	Lumens	6572.4	0.0	6572.4
	% Fixture	78.6	0.0	78.6
Total	Lumens	8365.2	0.0	8365.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.0	1.1
10°-20°	277.9	3.3
20°-30°	412.9	4.9
30°-40°	592.9	7.1
40°-50°	1051.2	12.6
50°-60°	1798.7	21.5
60°-70°	2553.5	30.5
70°-80°	1398.5	16.7
80°-90°	184.6	2.2
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°	8365.2	100.0
0°-180°	8365.2	100.0

Coefficient of Utilization



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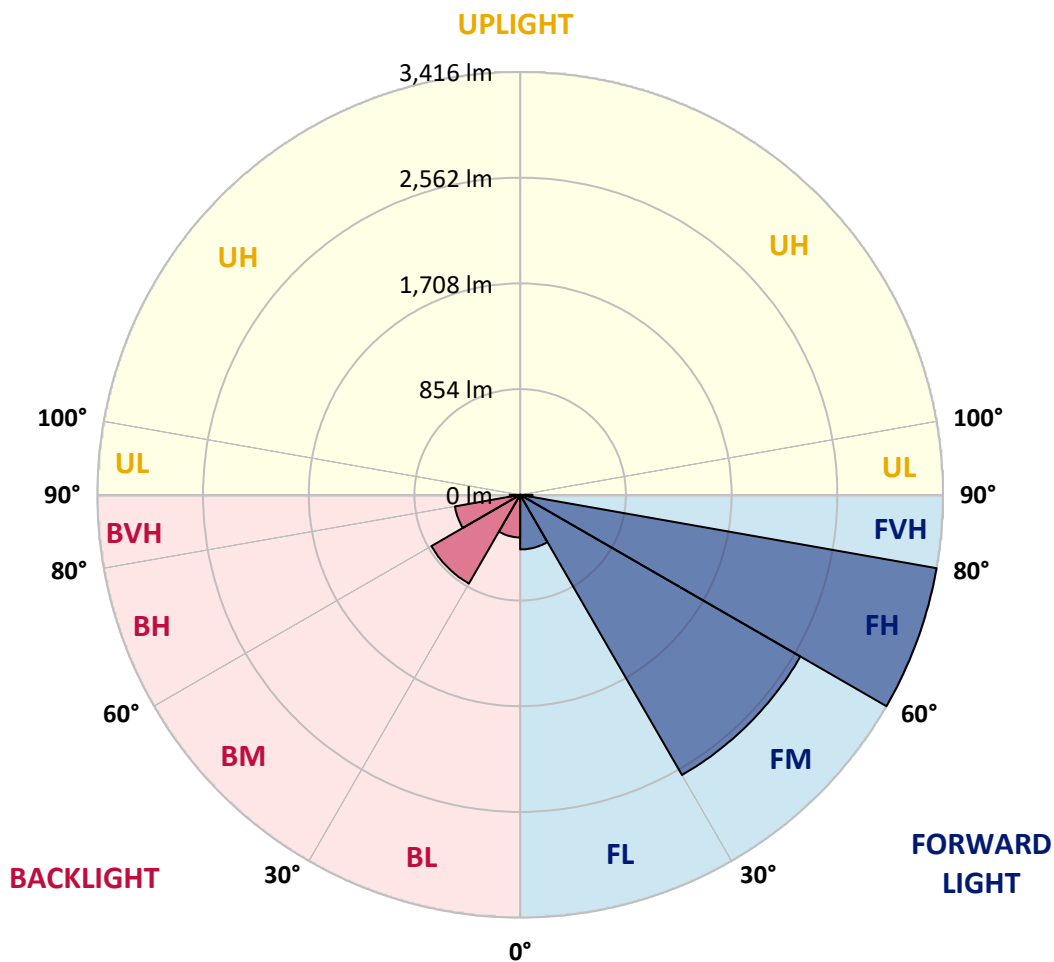
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	441.5	5.3			
FM	(30°-60°)	2614.4	31.3			
FH	(60°-80°)	3416.4	40.8			G2/5000
FVH	(80°-90°)	100.1	1.2			G2/225
BL	(0°-30°)	344.3	4.1	B1/500		
BM	(30°-60°)	828.4	9.9	B1/1000		
BH	(60°-80°)	535.7	6.4	B2/1000		G2/1000
BVH	(80°-90°)	84.5	1.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8
2.5°	1055.5	1053.4	1054.4	1050.6	1041.3	1031.7	1031.7	1021.4	1010.5	999.6	987.6
5°	1121.1	1117.9	1115.1	1103.2	1085.3	1065.2	1061.9	1041.3	1019.1	996.8	975.2
7.5°	1175.8	1172.6	1164.5	1142.7	1116.8	1086.9	1083.1	1056.0	1026.8	995.9	965.5
10°	1214.9	1212.7	1196.9	1169.4	1139.0	1103.7	1097.2	1069.5	1034.8	996.4	958.0
12.5°	1236.5	1233.4	1214.2	1181.8	1146.0	1110.2	1103.7	1077.2	1037.6	995.3	950.2
15°	1227.9	1226.2	1208.3	1175.3	1139.5	1108.6	1103.2	1076.1	1035.9	991.5	943.3
17.5°	1191.1	1194.7	1180.7	1148.2	1118.8	1097.2	1091.3	1065.7	1027.8	982.2	932.4
20°	1140.0	1144.4	1137.3	1104.2	1087.5	1073.4	1070.2	1049.5	1014.2	968.7	919.4
22.5°	1085.8	1089.6	1090.2	1059.3	1053.8	1048.4	1045.6	1031.1	1002.4	960.6	910.7
25°	1048.4	1052.8	1053.8	1026.8	1029.9	1031.7	1031.1	1020.7	1000.3	960.6	911.8
27.5°	1038.7	1040.9	1039.8	1014.8	1020.7	1029.9	1030.5	1028.4	1008.8	971.4	927.1
30°	1072.2	1073.4	1059.8	1022.5	1028.4	1040.2	1040.9	1039.8	1027.3	999.6	961.1
32.5°	1217.6	1216.5	1169.9	1073.4	1052.8	1057.0	1058.7	1068.4	1069.5	1046.3	1010.5
35°	1438.7	1438.1	1384.0	1219.2	1122.2	1099.3	1101.5	1116.8	1130.2	1114.5	1094.0
37.5°	1682.2	1683.8	1650.6	1427.3	1271.8	1176.9	1174.8	1186.1	1210.6	1215.9	1218.6
40°	1952.0	1960.2	1958.7	1666.4	1481.6	1309.2	1287.5	1274.4	1321.6	1351.5	1389.9
42.5°	2260.6	2258.3	2259.4	1928.8	1721.2	1517.3	1477.3	1416.4	1471.2	1522.7	1607.3
45°	2525.7	2534.3	2540.9	2207.9	1989.6	1755.3	1714.7	1604.1	1653.4	1730.3	1859.4
47.5°	2792.4	2777.2	2789.1	2518.6	2288.3	2026.9	1974.4	1825.3	1871.3	1979.8	2176.1
50°	3102.9	3096.0	3041.8	2924.2	2649.2	2302.3	2233.5	2056.2	2123.5	2268.2	2566.8
52.5°	3381.6	3343.8	3301.5	3242.8	3004.3	2580.9	2493.7	2296.3	2419.9	2599.3	3052.0
55°	3483.5	3458.0	3509.0	3585.0	3380.1	2865.1	2767.4	2576.6	2754.5	2978.3	3622.9
57.5°	3592.0	3600.6	3715.6	3869.0	3735.6	3168.1	3062.3	2908.4	3121.4	3402.2	4260.9
60°	3646.2	3680.8	3910.2	4198.0	4074.0	3500.3	3398.9	3289.5	3528.5	3870.5	4897.4
62.5°	3655.5	3702.1	4026.7	4313.5	4539.6	4009.3	3892.3	3773.6	4037.1	4388.3	5358.1
65°	3486.2	3557.7	4016.4	4455.6	4964.0	4859.9	4785.7	4578.7	4717.9	4844.2	5436.7
67.5°	2989.2	3067.3	3619.1	4397.1	5304.5	5742.4	5728.4	5422.7	5243.8	5020.4	4854.0
70°	2193.9	2256.8	2786.9	3759.0	5155.9	6435.3	6460.3	5969.6	5390.6	4646.4	3609.3
71°	1774.3	1828.5	2328.3	3337.2	4866.5	6471.1	6523.1	5994.0	5237.7	4308.6	3021.7
72.5°	1104.2	1134.6	1546.1	2518.6	4190.5	6102.5	6190.3	5681.8	4756.4	3641.9	2135.9
75°	416.9	428.9	573.6	1110.8	2501.3	4584.6	4690.8	4294.0	3341.5	2078.9	894.0
77.5°	223.9	229.8	284.7	461.9	1002.4	2628.1	2764.8	2449.1	1602.9	727.4	365.4
80°	150.1	154.0	196.8	273.8	460.8	1000.7	1114.5	983.4	600.1	415.2	260.1
82.5°	97.0	99.3	133.8	180.0	297.6	351.9	401.7	419.6	374.7	297.6	157.3
85°	64.0	65.5	88.4	115.0	184.3	173.5	177.9	232.7	255.3	196.2	80.2
87.5°	36.9	38.0	53.1	59.1	83.0	65.0	70.4	110.6	151.9	128.0	46.1
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°	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8
2.5°	982.2	978.0	968.3	962.3	959.5	958.4	957.4	959.5	959.5	958.4	956.2
5°	964.4	956.2	939.9	928.6	922.6	921.0	923.2	926.0	927.5	927.5	926.0
7.5°	951.3	939.4	917.8	902.1	892.8	890.1	896.1	905.9	912.4	915.6	916.1
10°	940.5	924.3	900.5	884.2	876.6	875.5	883.0	895.6	909.2	915.1	916.1
12.5°	930.9	912.4	886.4	871.1	865.7	868.4	878.7	890.1	905.9	914.6	915.1
15°	921.7	902.5	874.9	859.1	858.2	862.6	872.3	881.4	893.4	904.2	904.2
17.5°	910.7	890.1	861.5	846.7	846.7	850.5	857.1	862.0	869.5	879.8	879.4
20°	897.8	876.6	847.3	832.1	828.9	826.7	826.7	827.8	834.3	843.5	845.1
22.5°	888.0	866.2	835.3	817.0	802.2	788.3	782.2	780.1	786.0	794.7	796.8
25°	888.0	866.2	831.7	800.7	764.8	737.8	726.4	723.1	729.2	737.2	740.6
27.5°	902.5	880.9	840.3	786.0	720.4	677.1	663.6	660.9	666.3	672.7	676.1
30°	936.8	915.6	865.2	769.3	671.2	614.3	599.0	596.4	599.0	601.8	605.5
32.5°	993.6	975.7	905.9	754.0	621.3	557.3	538.9	534.5	535.6	536.2	539.4
35°	1086.4	1078.2	960.1	736.3	574.0	510.6	491.7	483.0	482.5	485.2	488.9
37.5°	1228.4	1233.4	1029.9	710.2	535.1	477.5	458.7	450.0	445.6	450.9	455.4
40°	1428.9	1440.3	1110.8	674.9	503.1	458.0	438.1	429.8	423.9	422.4	424.4
42.5°	1689.7	1686.5	1193.2	629.9	468.3	445.1	423.9	415.2	405.5	393.0	390.4
45°	1998.6	1952.0	1261.9	574.6	428.9	432.7	411.0	398.9	383.8	365.4	363.3
47.5°	2363.6	2235.2	1304.2	515.5	391.9	416.4	396.3	377.8	355.5	343.7	342.1
50°	2803.3	2566.3	1334.2	455.4	358.9	395.8	375.8	351.2	329.6	326.4	325.8
52.5°	3323.5	2957.2	1371.0	401.2	332.8	369.2	355.1	330.1	312.8	314.4	314.4
55°	3877.2	3361.5	1372.0	358.3	310.1	338.3	339.9	319.8	306.3	311.7	313.2
57.5°	4381.8	3715.0	1264.2	328.1	288.4	313.9	335.0	323.6	313.2	332.4	333.9
60°	4822.0	3987.1	1032.2	303.1	270.5	304.6	345.8	346.9	344.8	396.3	400.0
62.5°	4983.0	3989.9	732.9	281.9	260.8	310.1	368.7	370.2	370.2	417.9	425.0
65°	4757.6	3657.5	487.9	269.4	254.2	322.0	387.1	380.1	363.3	396.3	388.6
67.5°	3962.8	2847.1	356.6	261.2	245.1	322.5	403.2	385.5	356.6	385.0	371.9
70°	2723.5	1811.7	298.6	253.7	234.2	308.5	412.1	383.8	346.9	358.9	341.5
71°	2192.3	1445.8	283.5	250.9	229.8	300.4	413.1	381.6	342.1	349.7	333.9
72.5°	1444.1	890.7	265.1	245.1	223.4	286.2	410.3	376.7	335.5	336.1	325.8
75°	569.7	369.2	238.5	231.5	205.0	263.5	398.5	366.5	323.1	312.3	307.8
77.5°	287.8	241.3	209.8	212.4	183.3	240.1	381.6	349.7	305.8	291.1	287.8
80°	210.4	183.3	179.4	184.3	158.8	217.4	360.5	327.0	283.5	298.6	292.2
82.5°	128.0	111.7	140.4	152.4	132.8	194.0	335.5	300.4	255.3	235.3	227.7
85°	60.7	65.5	101.4	112.2	98.2	155.0	306.9	271.1	222.8	192.4	195.7
87.5°	29.9	36.3	58.0	67.3	64.5	113.8	231.5	210.4	175.7	144.7	141.6
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)