

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: LUMARK

Report Number: P959987

Luminaire Tested: **NAV-SB1B-830-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959987
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-830-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5325.9 lumens
Efficiency: N/A
Efficacy: 133.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G1

Input Watts (W): 39.8
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



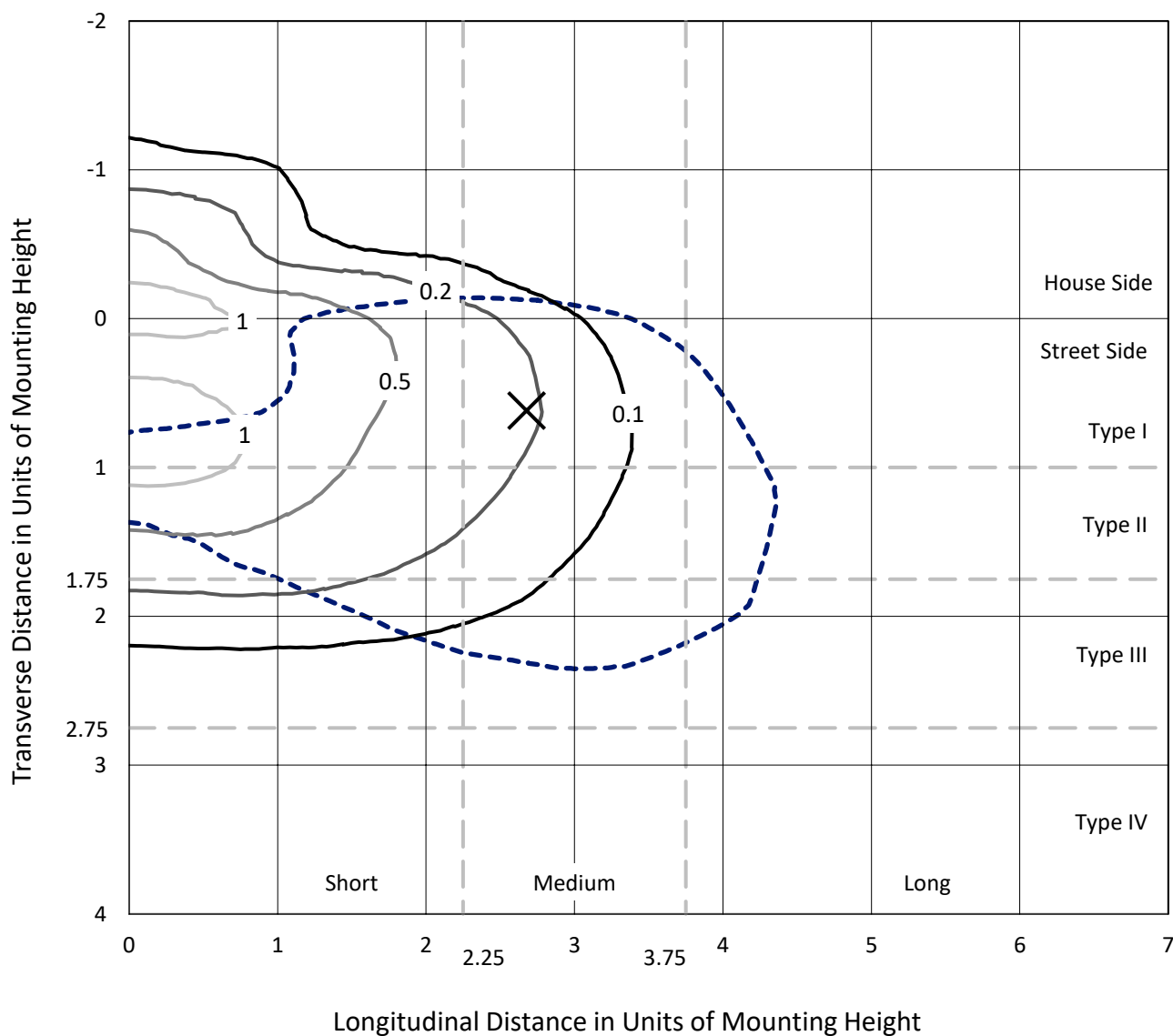
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

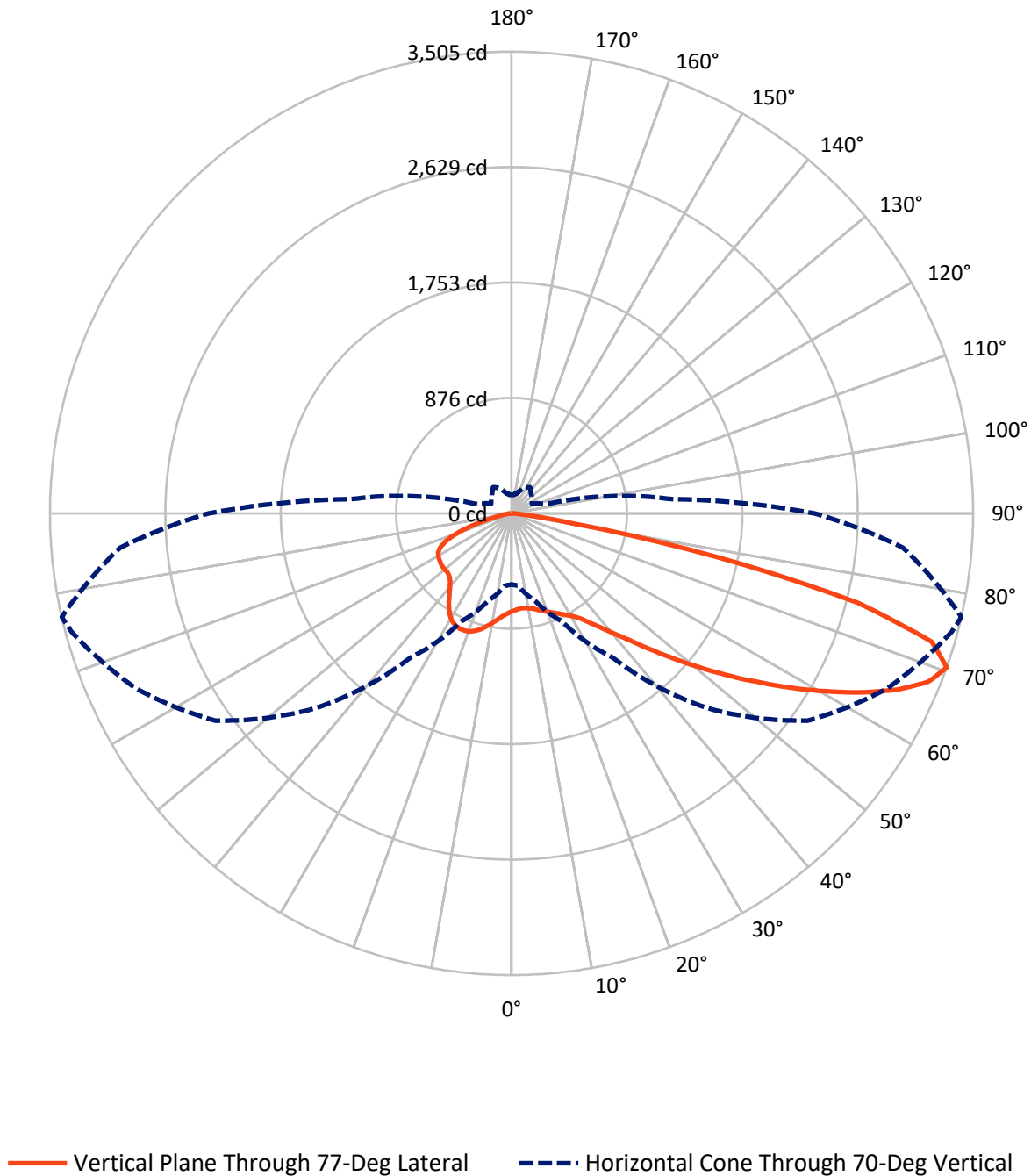
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1166.3	0.0	1166.3
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	4159.6	0.0	4159.6
	% Fixture	78.1	0.0	78.1
Total	Lumens	5325.9	0.0	5325.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.9	1.3
10°-20°	204.5	3.8
20°-30°	349.8	6.6
30°-40°	562.4	10.6
40°-50°	878.1	16.5
50°-60°	1173.0	22.0
60°-70°	1250.2	23.5
70°-80°	769.6	14.5
80°-90°	67.4	1.3
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°	5325.9	100.0
0°-180°	5325.9	100.0

Coefficient of Utilization



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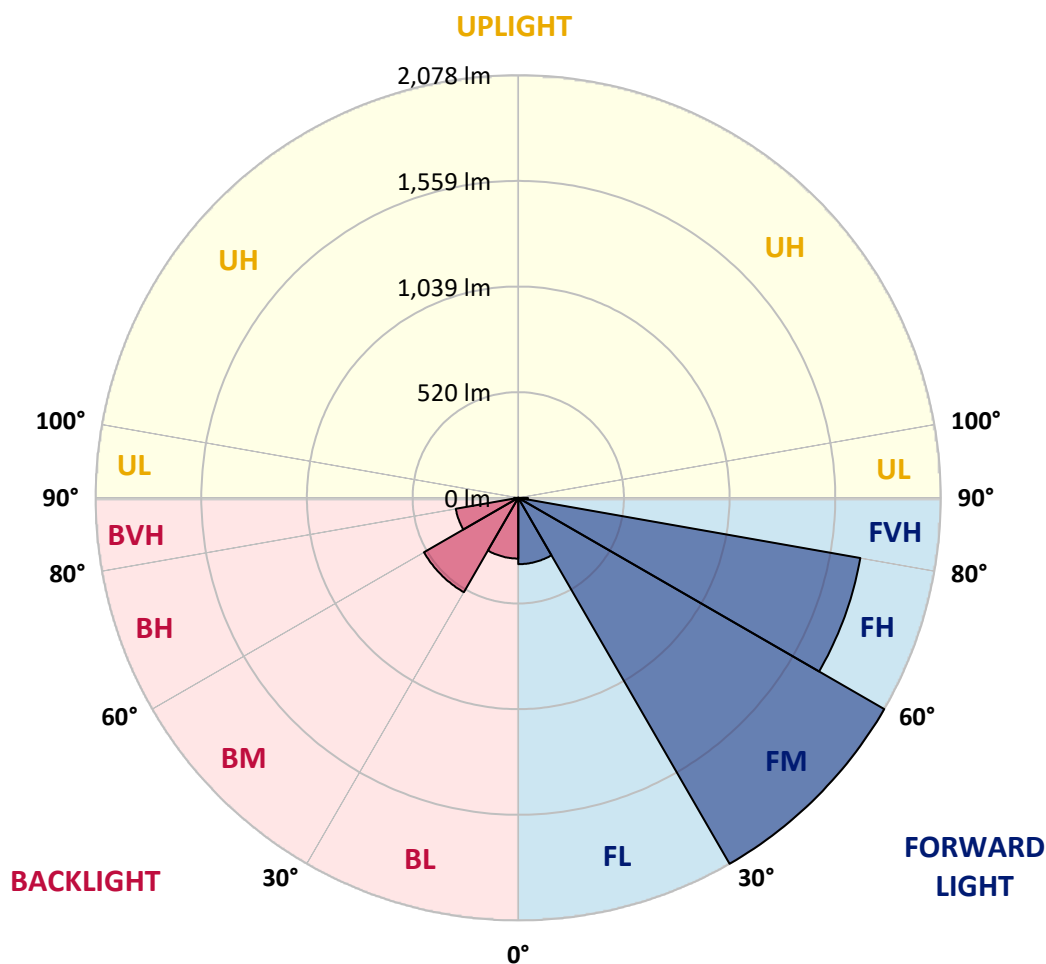
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	326.3	6.1			
FM	(30°-60°)	2078.1	39.0			
FH	(60°-80°)	1708.1	32.1			G1/1800
FVH	(80°-90°)	47.2	0.9			G1/100
BL	(0°-30°)	298.8	5.6	B1/500		
BM	(30°-60°)	535.5	10.1	B1/1000		
BH	(60°-80°)	311.7	5.9	B1/500		G1/500
BVH	(80°-90°)	20.3	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0
2.5°	684.9	684.6	688.2	689.3	695.9	700.5	709.2	718.4	730.4	731.8	739.2
5°	645.3	645.3	649.4	653.8	662.3	671.6	684.9	701.0	721.7	725.0	743.3
7.5°	611.8	614.0	617.6	626.0	635.8	649.1	669.6	692.6	719.9	725.0	754.5
10°	584.8	587.2	591.6	598.4	613.2	631.7	658.5	687.9	724.5	732.7	770.8
12.5°	576.4	578.8	581.3	586.4	600.0	621.9	653.8	690.1	735.6	743.8	793.2
15°	596.0	599.0	597.1	595.7	602.8	622.7	656.0	698.0	749.6	761.3	820.7
17.5°	641.2	642.4	638.0	625.1	624.1	634.7	666.4	708.9	767.0	779.8	848.6
20°	714.3	712.5	703.5	678.1	663.7	661.4	684.1	725.3	785.0	798.7	878.5
22.5°	813.6	811.5	793.5	753.4	721.2	699.9	709.7	746.5	805.2	820.5	907.7
25°	937.5	934.5	908.0	853.5	803.6	750.9	744.7	774.7	830.0	844.2	938.3
27.5°	1082.1	1079.6	1050.9	979.0	906.9	820.7	788.0	807.7	856.0	872.1	972.7
30°	1237.6	1244.7	1193.9	1116.4	1025.3	911.8	846.3	848.3	889.5	903.9	1014.4
32.5°	1420.2	1432.5	1371.4	1273.3	1148.9	1010.9	920.0	905.1	938.3	950.3	1067.0
35°	1601.4	1615.3	1564.6	1456.0	1312.8	1127.6	996.9	970.3	1003.3	1016.3	1136.9
37.5°	1758.0	1776.5	1750.3	1656.0	1488.2	1268.3	1097.4	1046.8	1083.1	1099.5	1230.7
40°	1881.5	1909.9	1908.0	1849.1	1694.9	1439.1	1224.7	1141.5	1182.4	1200.2	1344.5
42.5°	1981.9	2006.4	2027.8	2024.8	1910.7	1633.0	1374.4	1264.5	1295.6	1316.1	1472.4
45°	2051.2	2077.4	2123.2	2172.6	2118.3	1840.6	1546.0	1410.5	1438.8	1469.6	1624.8
47.5°	2113.1	2142.9	2202.3	2280.6	2294.5	2049.0	1734.0	1580.4	1606.3	1638.3	1777.9
50°	2118.6	2144.2	2236.4	2347.5	2419.7	2249.3	1935.8	1771.1	1795.3	1829.4	1941.9
52.5°	1986.9	2027.1	2188.2	2345.5	2477.2	2416.7	2136.3	1969.3	1996.6	2037.6	2111.5
55°	1542.2	1601.4	2046.5	2272.4	2456.8	2525.0	2327.0	2180.2	2215.1	2258.0	2282.3
57.5°	1328.4	1354.2	1624.6	2139.3	2363.5	2553.1	2487.9	2393.3	2449.4	2496.4	2462.8
60°	1193.9	1215.4	1375.2	1932.2	2240.8	2508.6	2612.3	2591.8	2688.9	2744.8	2647.5
62.5°	1049.9	1070.3	1215.8	1613.5	2083.6	2434.7	2690.8	2775.1	2934.4	2995.5	2821.5
65°	906.9	924.4	1063.7	1355.7	1884.0	2360.8	2731.4	2933.5	3161.6	3224.9	2966.0
67.5°	747.6	762.1	893.8	1143.7	1641.2	2259.6	2751.6	3058.2	3359.3	3413.7	3037.5
70°	539.6	550.7	686.9	904.5	1336.5	2085.6	2743.5	3146.6	3461.9	3505.3	2983.5
72.5°	255.0	265.2	425.0	587.2	944.0	1746.8	2577.9	3076.5	3357.7	3336.2	2652.9
75°	136.1	144.8	244.2	322.2	498.7	1197.4	2109.6	2650.1	2819.6	2714.8	1960.6
77.5°	92.1	99.0	151.1	193.4	227.8	568.5	1355.9	1834.9	1765.4	1592.4	982.0
80°	73.1	80.2	123.8	130.9	110.2	205.4	560.3	849.4	610.2	488.0	279.3
82.5°	56.2	64.1	104.2	94.9	60.0	84.3	163.1	268.7	156.3	118.9	67.6
85°	34.3	42.8	81.8	60.6	33.8	38.4	55.4	74.7	47.8	39.9	24.3
87.5°	17.4	24.6	41.4	22.1	15.3	9.0	14.8	14.8	12.5	10.9	6.3
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°	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0
2.5°	745.8	751.2	760.4	769.2	776.0	782.6	789.1	792.6	793.8	798.1	800.5
5°	754.5	764.5	782.6	799.5	810.2	816.6	821.3	824.0	824.6	825.9	828.1
7.5°	770.6	786.7	811.7	828.6	836.6	836.0	834.1	827.3	824.6	822.2	822.7
10°	793.2	814.5	845.3	857.0	852.1	839.1	822.2	802.2	792.9	783.9	781.2
12.5°	821.3	848.3	878.5	878.0	853.7	820.2	780.9	750.4	731.0	717.1	713.8
15°	855.4	886.5	909.7	891.1	837.9	777.7	720.1	680.3	662.9	647.6	646.0
17.5°	890.6	923.8	934.5	887.0	798.1	714.6	649.4	618.1	600.9	592.8	595.2
20°	925.0	958.0	949.3	863.6	737.6	643.2	585.1	567.8	564.4	566.2	565.5
22.5°	961.2	990.7	952.2	818.3	660.4	570.1	538.1	538.7	546.6	552.4	553.7
25°	998.4	1018.2	944.3	752.9	577.5	516.4	508.4	517.1	532.7	543.9	546.9
27.5°	1034.0	1042.7	927.1	671.8	506.2	477.9	479.3	497.2	520.7	536.3	540.1
30°	1074.4	1064.6	894.1	580.8	456.8	444.8	456.3	477.3	500.8	514.8	517.9
32.5°	1120.0	1083.4	841.7	496.4	422.0	418.4	437.3	450.9	461.2	465.4	467.5
35°	1176.7	1109.9	774.7	437.3	390.6	399.0	417.1	410.2	406.1	404.0	406.1
37.5°	1250.4	1145.6	696.1	398.8	365.2	385.2	392.5	371.3	355.2	347.3	349.1
40°	1339.0	1198.0	620.5	369.0	349.1	373.1	360.3	334.7	314.3	303.1	303.8
42.5°	1437.5	1252.9	557.0	346.7	340.1	363.4	336.6	306.1	273.1	269.5	273.1
45°	1540.9	1309.2	513.6	329.5	335.8	354.9	323.0	273.6	250.1	264.6	272.2
47.5°	1644.2	1361.1	487.4	316.7	333.6	345.3	311.0	255.5	238.9	259.9	269.8
50°	1759.3	1407.4	475.7	307.4	331.2	341.5	292.9	250.9	227.2	241.1	251.5
52.5°	1873.6	1443.5	467.0	298.2	327.6	338.5	284.2	245.5	213.0	213.8	219.6
55°	1987.7	1467.0	457.5	285.9	319.7	332.0	283.4	239.4	202.4	198.5	201.3
57.5°	2109.2	1480.3	445.7	272.2	306.1	315.3	282.6	234.8	199.2	192.8	193.6
60°	2233.2	1500.0	430.4	255.5	287.7	295.4	280.6	233.2	197.2	186.5	187.4
62.5°	2344.2	1506.7	412.2	239.7	264.3	275.7	276.5	231.9	192.0	173.7	173.7
65°	2417.0	1477.3	380.3	221.7	238.9	255.5	268.7	227.2	182.8	164.5	164.5
67.5°	2414.0	1393.3	330.4	198.5	214.4	233.2	257.2	219.4	171.6	153.0	153.9
70°	2301.6	1227.4	267.0	171.6	187.4	209.2	242.5	207.6	158.2	140.4	142.1
72.5°	1974.0	960.6	193.9	139.9	156.0	184.4	223.3	193.4	144.5	129.3	128.4
75°	1410.2	608.0	131.5	107.4	121.4	156.3	199.7	176.7	132.0	129.9	122.5
77.5°	720.4	290.5	87.0	78.5	84.6	123.3	167.8	158.0	134.0	107.2	95.4
80°	234.3	107.2	54.8	53.5	56.2	82.1	129.9	129.6	101.5	72.9	64.4
82.5°	74.7	46.1	35.8	34.3	33.0	51.6	90.5	102.6	68.5	46.1	45.8
85°	29.7	27.6	21.0	19.4	13.9	24.3	47.5	68.2	51.0	33.3	34.1
87.5°	10.9	10.9	5.7	4.1	3.0	8.2	12.8	20.5	29.2	17.2	16.9
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)