

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: P960868

Luminaire Tested: **NAV-SB1D-735-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960868
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-735-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

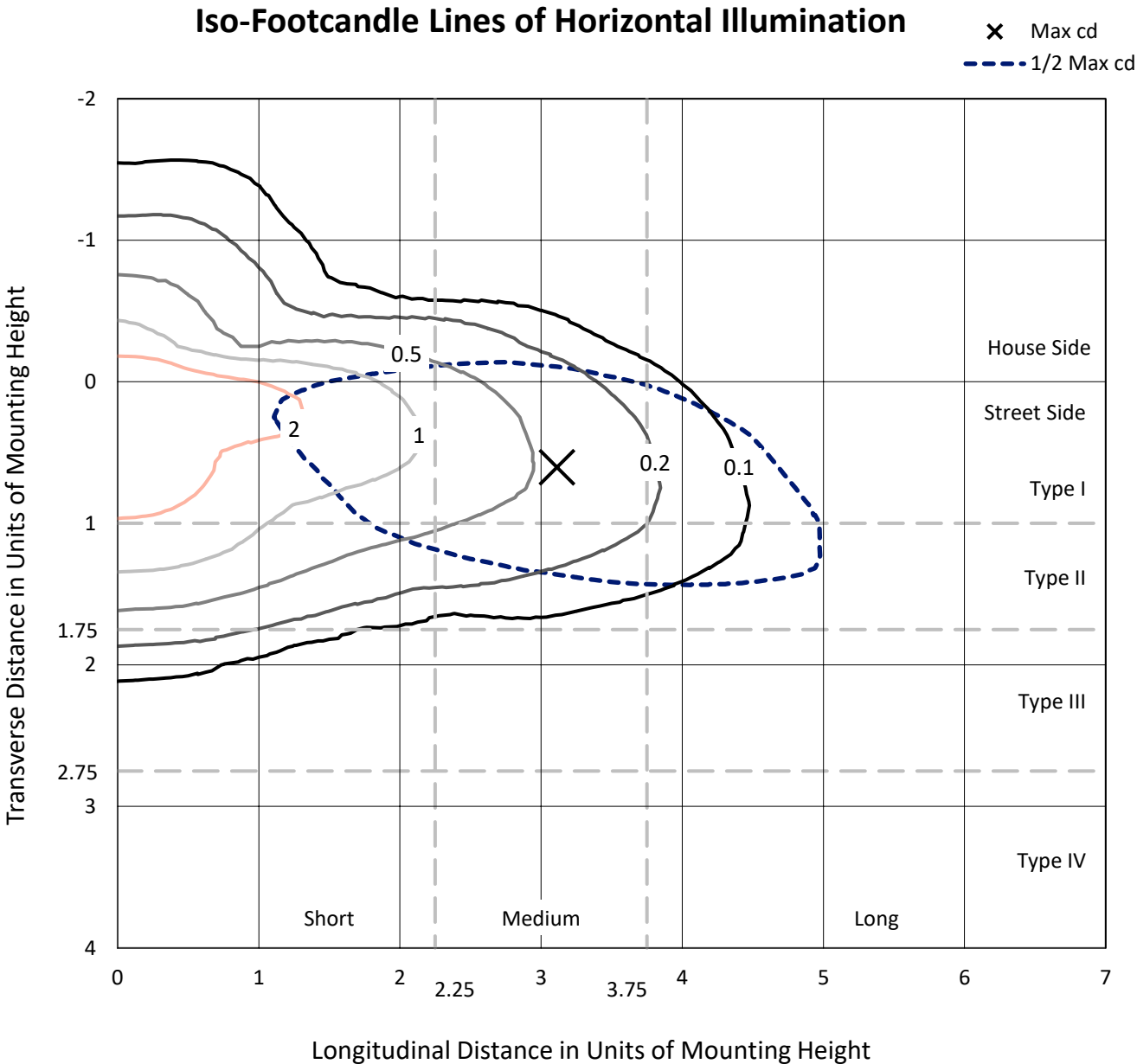
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10370.9 lumens
Efficiency: N/A
Efficacy: 130.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 79.6
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



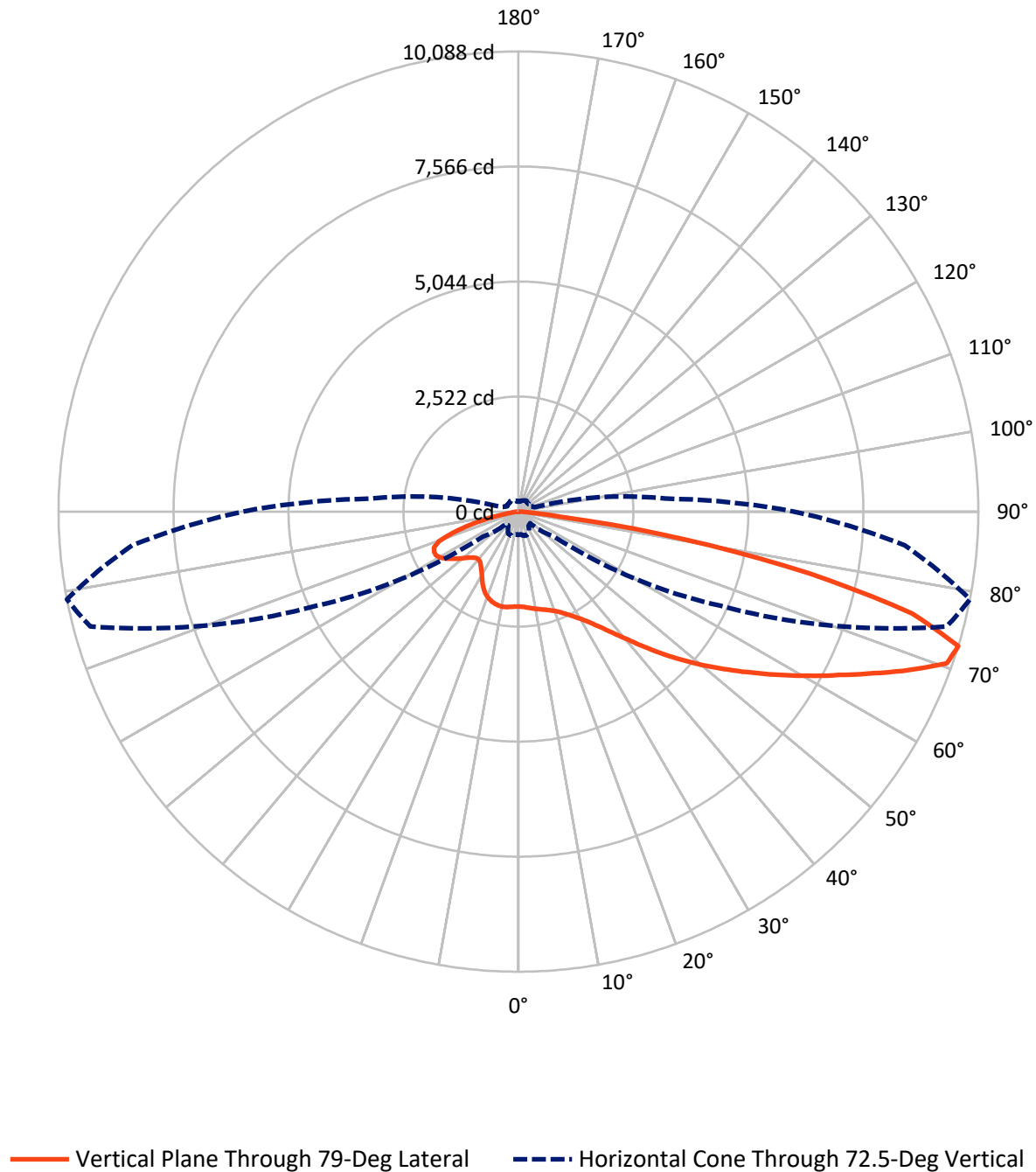
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Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2282.2	0.0	2282.2
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	8088.8	0.0	8088.8
	% Fixture	78.0	0.0	78.0
Total	Lumens	10370.9	0.0	10370.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.0	1.8
10°-20°	494.1	4.8
20°-30°	797.2	7.7
30°-40°	1196.5	11.5
40°-50°	1697.3	16.4
50°-60°	2143.5	20.7
60°-70°	2177.0	21.0
70°-80°	1483.7	14.3
80°-90°	192.5	1.9
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°	10370.9	100.0
0°-180°	10370.9	100.0

Coefficient of Utilization



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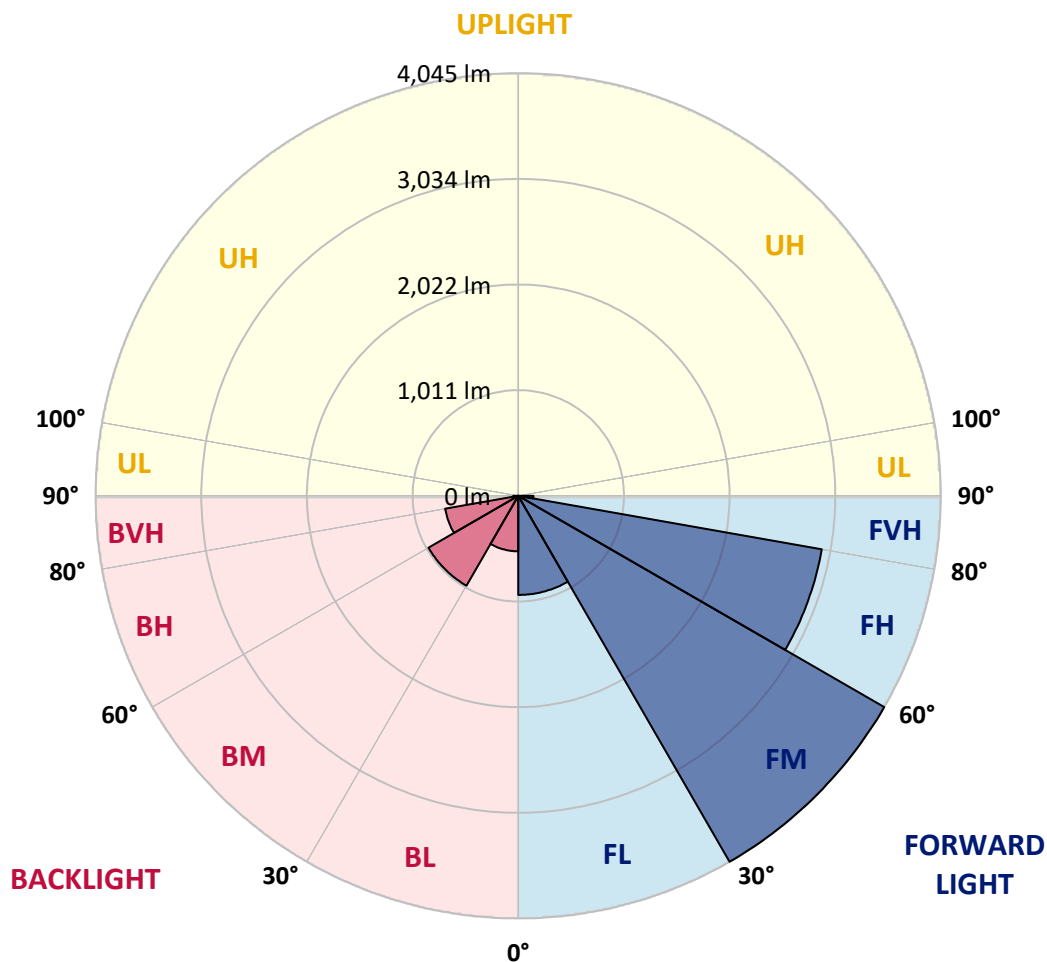
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	948.7	9.1			
FM	(30°-60°)	4044.9	39.0			
FH	(60°-80°)	2950.2	28.4			G2/5000
FVH	(80°-90°)	145.0	1.4			G2/225
BL	(0°-30°)	531.6	5.1	B2/1000		
BM	(30°-60°)	992.5	9.6	B1/1000		
BH	(60°-80°)	710.6	6.9	B2/1000		G2/1000
BVH	(80°-90°)	47.5	0.5			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9
2.5°	2083.0	2073.1	2079.1	2077.0	2079.7	2083.0	2084.0	2085.7	2091.2	2090.7	2090.1
5°	2078.6	2068.7	2077.0	2074.2	2081.4	2089.0	2095.6	2101.7	2110.4	2114.3	2108.7
7.5°	2069.3	2062.7	2070.9	2079.1	2092.3	2103.8	2113.1	2126.9	2139.5	2141.6	2145.5
10°	2014.9	2010.0	2029.2	2050.6	2086.8	2118.1	2138.4	2154.2	2168.0	2170.2	2175.7
12.5°	1958.5	1952.4	1973.8	2002.8	2061.6	2118.1	2160.9	2181.7	2193.8	2200.9	2209.2
15°	1949.1	1944.2	1956.2	1981.5	2030.3	2103.3	2176.2	2214.6	2225.1	2233.3	2236.5
17.5°	1994.1	1984.8	1989.7	1998.4	2027.0	2089.6	2188.3	2251.9	2267.8	2276.6	2276.6
20°	2098.3	2085.2	2077.5	2059.9	2055.0	2091.7	2187.2	2296.9	2317.7	2328.7	2331.5
22.5°	2237.2	2228.4	2211.8	2167.5	2119.2	2118.7	2208.1	2354.5	2393.5	2403.9	2397.3
25°	2405.0	2391.8	2370.9	2310.7	2217.9	2171.9	2243.1	2428.0	2493.3	2496.1	2476.8
27.5°	2598.1	2578.4	2549.8	2470.2	2345.2	2255.2	2296.9	2512.5	2608.0	2606.9	2567.3
30°	2801.6	2781.8	2751.7	2655.2	2497.7	2367.6	2371.5	2603.6	2744.0	2738.0	2670.5
32.5°	2950.3	2935.5	2929.4	2854.8	2673.2	2500.5	2457.1	2704.5	2911.9	2906.4	2812.0
35°	3064.3	3045.2	3052.3	3014.4	2864.7	2649.1	2561.9	2824.7	3115.9	3115.4	2998.0
37.5°	3177.4	3160.4	3166.4	3141.2	3041.9	2837.8	2689.7	2971.7	3368.9	3381.0	3222.9
40°	3280.5	3262.4	3286.6	3263.0	3179.5	3038.6	2835.0	3137.9	3661.8	3684.9	3495.0
42.5°	3342.5	3328.3	3368.3	3368.9	3299.2	3208.1	2994.7	3321.1	4000.8	4052.3	3829.6
45°	3363.9	3358.9	3419.3	3431.9	3405.0	3306.3	3138.4	3520.8	4366.2	4458.3	4210.9
47.5°	3340.9	3331.6	3414.9	3461.5	3483.0	3352.4	3257.4	3736.9	4739.2	4874.2	4626.7
50°	3224.5	3206.5	3330.4	3428.6	3504.9	3382.6	3377.6	3986.5	5163.2	5310.8	5044.7
52.5°	3015.5	3001.8	3142.9	3313.4	3456.6	3397.4	3512.6	4259.2	5566.0	5756.8	5473.2
55°	2748.4	2730.3	2885.6	3108.3	3336.5	3392.4	3647.6	4564.2	6040.9	6234.7	5915.9
57.5°	2324.9	2288.7	2485.1	2748.4	3140.6	3386.4	3788.0	4867.5	6523.7	6755.8	6388.2
60°	1707.1	1653.4	1894.3	2206.4	2757.8	3327.7	3961.8	5207.7	7103.0	7312.0	6903.9
62.5°	994.0	962.8	1120.2	1411.5	2078.6	2982.1	4059.5	5603.3	7672.4	7891.9	7410.7
65°	771.8	763.1	776.7	799.3	1156.9	2232.8	3758.4	5988.9	8396.6	8550.2	7939.0
67.5°	706.0	699.5	705.5	663.3	587.0	1243.6	2973.3	6086.6	9172.3	9265.6	8401.5
70°	627.6	619.9	639.6	603.4	461.9	565.6	1921.2	5732.1	9789.5	9964.4	8753.2
72.5°	511.3	502.5	548.6	532.1	389.0	363.2	964.9	4890.1	9724.7	10087.8	8501.3
75°	392.8	387.9	442.7	456.4	317.0	285.8	463.0	3634.9	8557.9	8923.8	7326.9
77.5°	305.0	301.1	329.1	379.0	255.6	221.6	284.7	2305.7	6449.1	6513.4	5049.2
80°	228.8	217.8	243.5	293.5	199.2	161.8	193.1	1344.6	4076.5	3695.2	2197.6
82.5°	143.2	137.7	159.1	195.9	140.4	111.3	125.7	742.8	1633.6	962.2	424.0
85°	81.7	79.5	86.7	111.9	76.3	64.2	71.9	328.1	298.4	205.2	127.8
87.5°	32.9	31.8	39.5	49.9	28.0	23.6	25.2	79.0	65.8	60.9	42.2
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°	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9	2081.9
2.5°	2087.9	2087.9	2080.2	2068.1	2054.4	2045.7	2031.4	2027.6	2012.8	2008.4	2015.5
5°	2113.1	2108.7	2085.2	2051.1	2004.5	1961.7	1914.6	1885.0	1843.3	1828.4	1839.4
7.5°	2144.9	2132.9	2092.3	2017.7	1920.0	1824.0	1724.2	1648.5	1576.0	1550.3	1553.6
10°	2174.0	2157.0	2087.9	1957.3	1788.4	1622.2	1463.1	1351.7	1267.2	1232.7	1240.4
12.5°	2203.1	2171.9	2058.8	1857.0	1601.4	1375.9	1206.3	1119.6	1067.5	1025.8	1039.6
15°	2230.5	2186.6	2013.8	1722.5	1396.2	1167.4	1042.3	973.1	931.5	904.0	909.0
17.5°	2262.4	2199.2	1946.4	1552.0	1200.9	1023.2	921.1	879.3	871.1	867.9	870.0
20°	2306.8	2210.8	1857.5	1361.0	1057.1	907.9	855.3	851.4	850.9	849.2	854.6
22.5°	2354.5	2224.5	1740.1	1187.7	934.8	836.0	826.7	819.1	814.1	813.5	819.6
25°	2411.0	2228.9	1593.1	1045.6	830.6	802.1	791.1	779.5	776.2	776.2	779.5
27.5°	2465.8	2214.1	1421.9	922.2	771.8	770.8	756.4	752.7	752.1	753.8	758.1
30°	2520.8	2186.1	1251.8	808.1	737.8	737.8	732.9	735.6	737.8	743.3	747.1
32.5°	2594.8	2156.5	1109.8	723.5	708.2	702.7	707.7	713.2	715.3	722.5	728.5
35°	2703.4	2135.6	996.8	677.5	677.5	670.3	673.1	672.0	667.1	663.8	671.5
37.5°	2847.1	2134.6	903.5	656.1	651.7	650.6	651.2	644.0	624.8	601.8	602.4
40°	3020.0	2164.2	831.7	641.3	638.0	644.6	641.3	622.1	569.4	529.4	528.3
42.5°	3252.0	2248.6	785.6	623.2	633.0	641.3	628.1	561.7	526.1	499.2	498.2
45°	3525.2	2385.8	762.0	604.0	623.7	633.7	570.0	540.9	512.4	480.0	477.9
47.5°	3834.6	2558.6	756.4	585.9	602.9	609.0	545.3	532.1	499.8	464.6	461.9
50°	4171.4	2763.2	771.3	564.5	572.8	551.9	537.1	525.0	491.5	456.9	453.2
52.5°	4519.7	2988.7	800.9	535.5	542.5	519.5	533.8	523.4	486.6	439.9	436.6
55°	4862.1	3215.8	829.4	501.4	511.8	490.5	524.5	516.8	464.1	411.4	408.7
57.5°	5209.9	3441.8	857.4	471.2	482.2	462.5	509.6	499.2	438.9	385.1	384.0
60°	5571.4	3661.2	870.6	442.2	449.9	436.6	487.2	469.0	410.3	358.2	356.6
62.5°	5909.8	3844.0	849.2	413.1	418.0	412.6	457.6	433.4	381.8	328.1	327.5
65°	6249.4	3952.5	783.4	384.6	385.6	382.9	415.8	394.9	348.4	301.8	298.4
67.5°	6557.2	4013.4	678.6	353.8	351.1	350.0	376.9	353.3	316.0	275.4	272.1
70°	6622.5	3858.7	518.4	317.6	317.6	314.9	334.0	310.0	280.3	247.4	246.3
72.5°	6048.6	3246.0	368.1	276.4	280.8	275.4	291.3	271.0	244.2	222.2	215.6
75°	4877.5	2380.3	267.7	234.2	241.9	232.6	247.4	233.2	210.1	209.5	188.7
77.5°	3351.3	1471.8	194.2	193.1	198.5	186.5	203.6	195.9	175.0	165.6	155.3
80°	1430.2	587.0	141.6	149.2	149.2	138.3	158.0	160.2	142.1	137.7	137.7
82.5°	284.7	166.8	99.3	102.6	96.6	93.3	111.9	124.0	171.2	190.3	191.0
85°	85.6	61.4	59.8	56.0	49.4	49.9	65.8	124.5	153.6	87.7	75.7
87.5°	23.6	15.4	15.9	12.6	10.5	13.7	22.4	94.4	51.6	21.9	18.7
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)