

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: P882738

Luminaire Tested: **NAV-SB2D-730-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882738
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-730-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16011 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

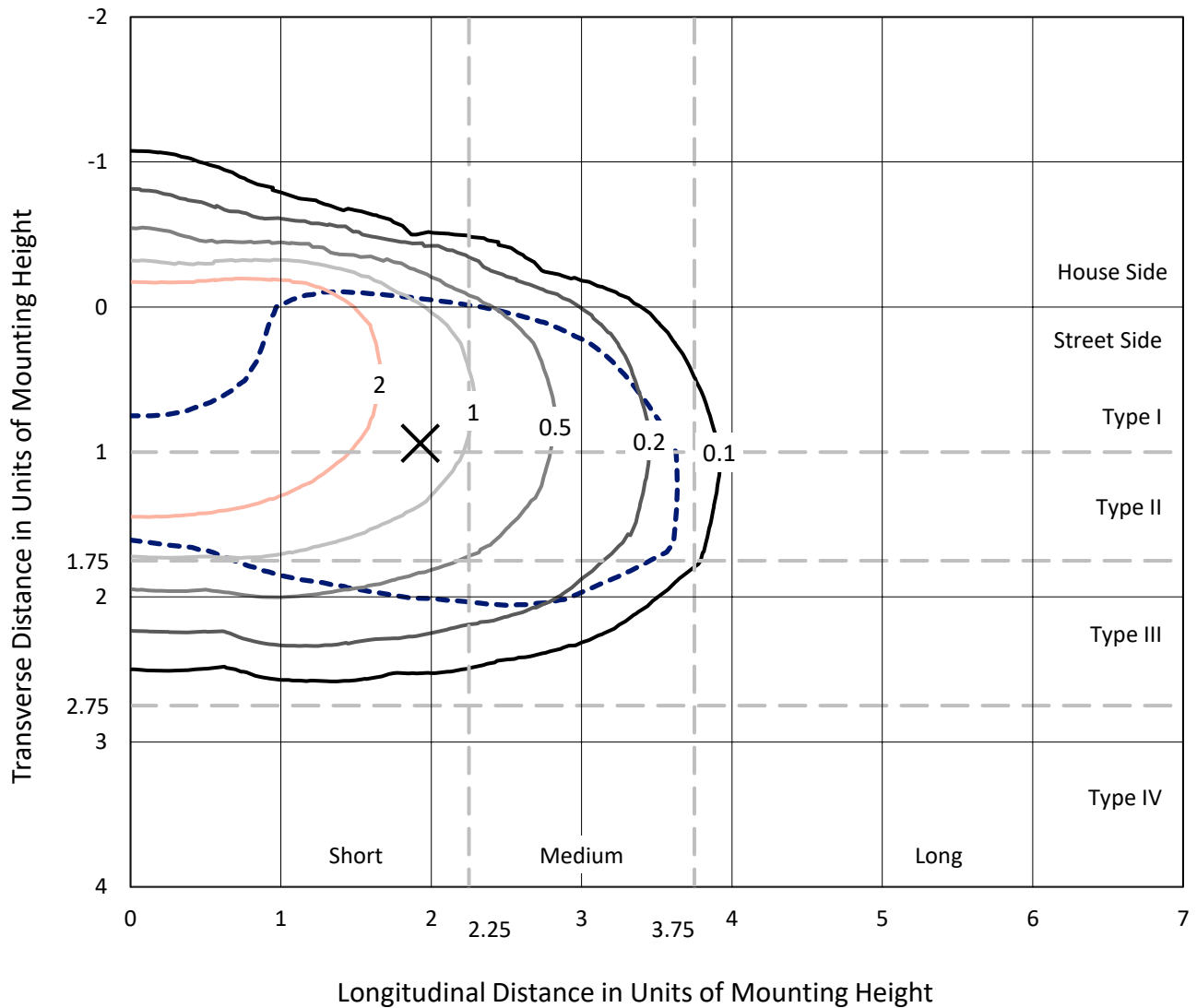
Input Watts (W): 147.6
Input Voltage (V): 120.0
Input Current (Ain): 1.234
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

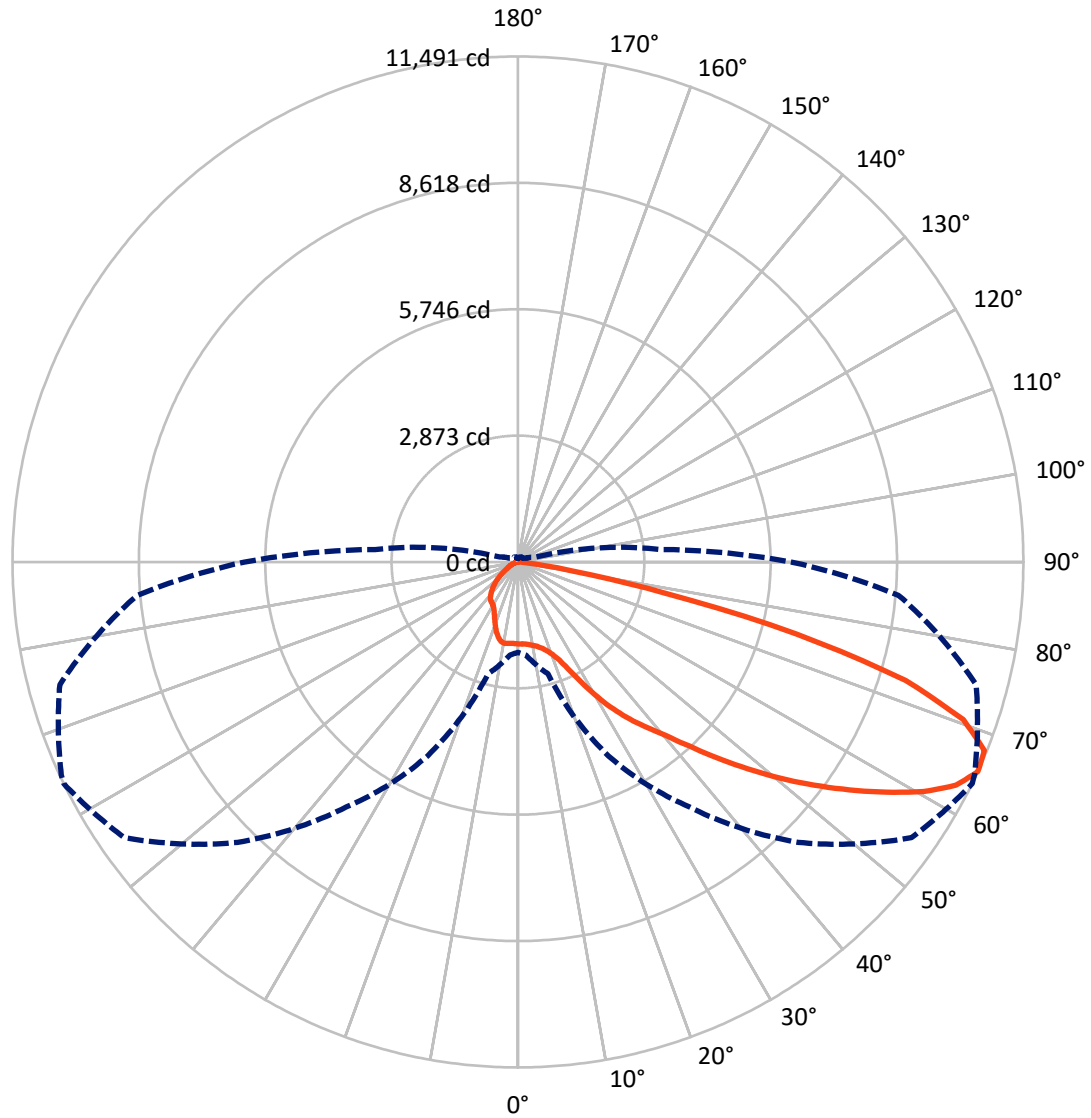
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2141.2	0.0	2141.2
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	13869.8	0.0	13869.8
	% Fixture	86.6	0.0	86.6
Total	Lumens	16011.0	0.0	16011.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.8	1.1
10°-20°	466.0	2.9
20°-30°	883.0	5.5
30°-40°	1786.8	11.2
40°-50°	3043.9	19.0
50°-60°	4139.5	25.9
60°-70°	3887.2	24.3
70°-80°	1557.4	9.7
80°-90°	75.4	0.5
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°	16011.0	100.0
0°-180°	16011.0	100.0

Coefficient of Utilization



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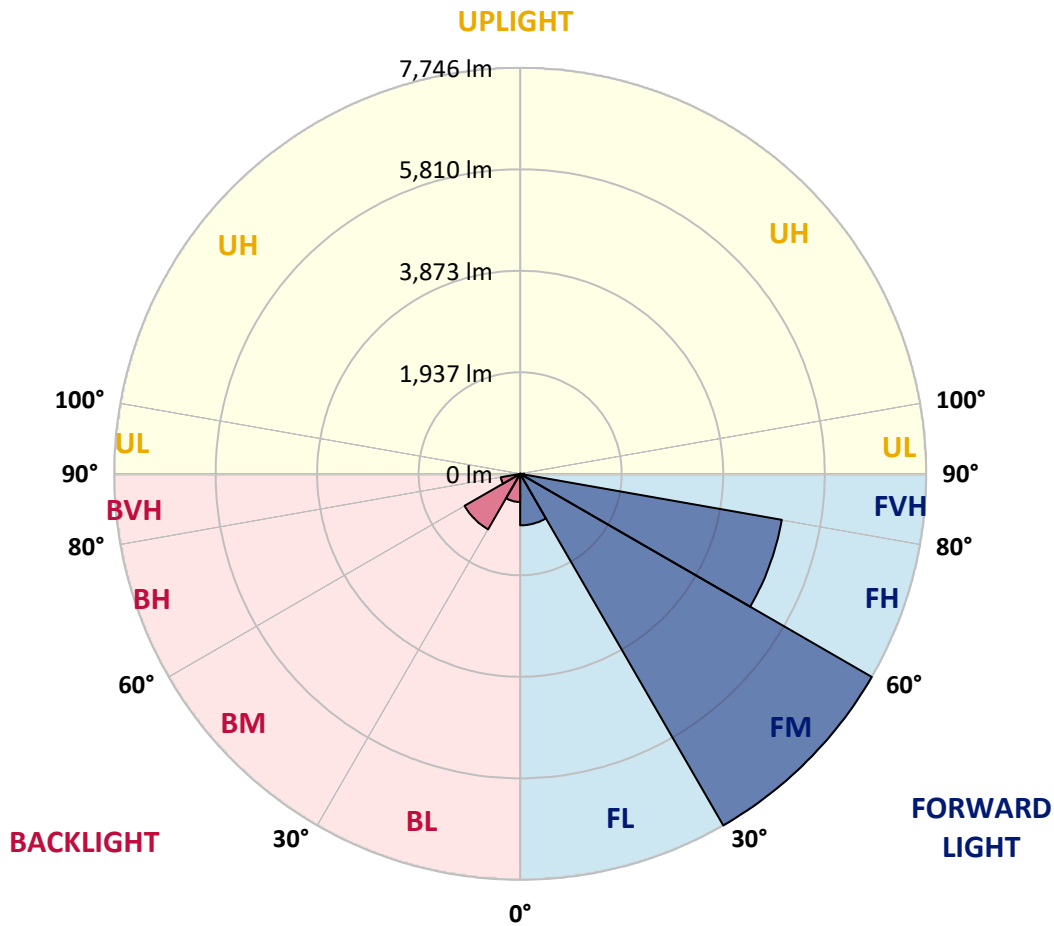
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	983.3	6.1			
FM (30°-60°)	7746.1	48.4			
FH (60°-80°)	5068.7	31.7			G3/7500
FVH (80°-90°)	71.8	0.4			G1/100
BL (0°-30°)	537.6	3.4	B2/1000		
BM (30°-60°)	1224.1	7.6	B2/2500		
BH (60°-80°)	375.8	2.3	B1/500		G1/500
BVH (80°-90°)	3.7	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2
2.5°	1855.8	1868.7	1865.5	1862.2	1861.2	1863.3	1864.4	1863.3	1863.3	1863.3	1864.4
5°	1820.4	1831.1	1831.1	1838.6	1849.4	1862.2	1871.9	1874.1	1876.2	1879.4	1878.3
7.5°	1752.8	1761.4	1767.8	1792.5	1819.3	1853.7	1882.6	1897.7	1899.8	1911.6	1915.9
10°	1706.6	1717.3	1728.1	1753.8	1792.5	1844.0	1893.4	1929.9	1935.2	1963.1	1976.0
12.5°	1704.5	1715.2	1729.2	1757.1	1802.1	1856.9	1917.0	1969.6	1979.2	2020.0	2046.9
15°	1727.0	1739.9	1752.8	1787.1	1835.4	1902.0	1966.4	2031.8	2041.5	2099.5	2128.4
17.5°	1773.2	1790.3	1800.0	1834.3	1885.9	1959.9	2044.7	2119.8	2128.4	2196.1	2232.5
20°	1864.4	1884.8	1888.0	1915.9	1966.4	2045.8	2146.7	2240.1	2250.8	2328.1	2368.9
22.5°	2053.3	2082.3	2056.5	2070.5	2115.6	2195.0	2304.5	2422.5	2437.6	2525.6	2562.1
25°	2386.0	2426.8	2360.3	2336.7	2356.0	2438.6	2576.0	2725.2	2742.4	2813.2	2831.5
27.5°	3039.7	2987.1	2886.2	2787.5	2729.5	2776.7	2931.3	3115.9	3137.4	3206.1	3184.6
30°	3757.8	3711.6	3575.3	3356.3	3218.9	3211.4	3354.2	3560.3	3585.0	3650.4	3585.0
32.5°	4476.9	4432.9	4284.8	4015.4	3777.1	3659.0	3757.8	3986.4	3999.3	4041.1	3944.5
35°	5184.2	5139.2	4991.0	4715.2	4422.2	4153.8	4134.5	4392.1	4396.4	4440.4	4296.6
37.5°	5895.9	5858.3	5700.5	5430.0	5141.3	4771.0	4591.8	4776.4	4781.7	4824.7	4675.5
40°	6403.5	6419.6	6311.2	6101.9	5854.0	5449.3	5104.8	5185.3	5153.1	5225.0	5135.9
42.5°	6839.3	6871.5	6777.1	6671.9	6528.1	6171.7	5740.2	5726.3	5674.8	5713.4	5621.1
45°	7216.1	7242.9	7158.1	7133.4	7130.2	6880.1	6434.7	6351.0	6279.0	6271.5	6161.0
47.5°	7354.5	7406.0	7442.5	7525.2	7686.2	7581.0	7152.7	7022.9	6942.4	6883.3	6708.4
50°	7407.1	7461.9	7586.4	7826.8	8207.8	8252.9	7867.6	7721.6	7622.9	7515.5	7257.9
52.5°	7336.3	7434.0	7601.4	8006.0	8558.8	8791.7	8553.4	8425.7	8313.0	8138.1	7756.0
55°	6918.8	7016.4	7358.8	8003.9	8733.8	9169.5	9201.7	9144.9	9018.2	8742.4	8158.5
57.5°	6038.6	6183.5	6725.6	7731.3	8730.6	9494.8	9837.2	9878.0	9736.3	9341.3	8475.1
60°	4819.3	5015.7	5676.9	7127.0	8461.1	9670.8	10394.2	10598.2	10447.9	9931.6	8731.6
62.5°	3362.8	3590.3	4216.1	6180.3	7845.0	9544.1	10801.0	11177.8	11064.0	10459.7	8830.4
65°	2051.2	2124.1	2628.6	4863.3	6797.5	9013.9	10926.6	11491.2	11453.6	10782.8	8684.4
67.5°	1366.4	1427.5	1572.4	3334.9	5276.5	7954.5	10626.1	11436.4	11447.2	10730.2	8149.9
70°	823.3	875.8	970.3	1939.5	3419.7	6296.2	9695.5	10738.8	10801.0	10027.1	7136.6
72.5°	339.2	374.6	460.5	879.1	1771.0	3996.0	7720.5	9220.0	9364.9	8431.1	5477.3
75°	192.1	210.4	270.5	441.1	768.5	1862.2	4676.5	6545.2	6758.8	5811.1	3295.2
77.5°	127.7	136.3	175.0	285.5	432.6	635.4	1998.6	3410.0	3817.9	3173.9	1426.5
80°	85.9	93.4	120.2	191.1	281.2	272.6	636.5	1263.3	1554.2	1090.5	347.8
82.5°	58.0	59.0	85.9	125.6	178.2	132.0	187.8	392.8	493.7	315.6	132.0
85°	33.3	32.2	63.3	73.0	79.4	54.7	56.9	118.1	154.6	133.1	75.1
87.5°	4.3	6.4	24.7	19.3	10.7	11.8	11.8	20.4	30.1	32.2	16.1
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°	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2
2.5°	1864.4	1863.3	1860.1	1856.9	1849.4	1845.1	1847.2	1845.1	1844.0	1845.1	1849.4
5°	1878.3	1875.1	1866.5	1855.8	1840.8	1822.5	1810.7	1793.6	1777.5	1767.8	1769.9
7.5°	1915.9	1912.7	1900.9	1870.8	1822.5	1746.3	1676.6	1615.4	1569.2	1542.4	1543.5
10°	1976.0	1970.7	1952.4	1885.9	1759.2	1592.8	1454.4	1339.5	1264.4	1229.0	1225.8
12.5°	2046.9	2040.4	2008.2	1871.9	1639.0	1379.2	1188.2	1060.5	990.7	959.6	956.3
15°	2130.6	2122.0	2058.7	1805.4	1464.0	1143.1	968.2	872.6	827.5	799.6	800.7
17.5°	2234.7	2219.7	2096.2	1705.5	1274.1	962.8	832.9	761.0	721.3	694.5	692.3
20°	2369.9	2345.2	2126.3	1586.4	1099.1	849.0	741.7	681.6	651.5	627.9	623.6
22.5°	2558.8	2523.4	2162.8	1457.6	975.7	770.7	674.1	630.1	605.4	578.5	574.2
25°	2792.8	2751.0	2207.9	1338.5	890.9	703.0	624.7	588.2	559.2	528.1	524.9
27.5°	3120.2	3045.1	2261.5	1240.8	817.9	645.1	579.6	538.8	505.5	479.8	474.4
30°	3485.1	3361.7	2308.8	1181.7	751.3	591.4	520.6	479.8	448.7	430.4	427.2
32.5°	3830.8	3663.3	2339.9	1156.0	691.2	530.2	456.2	412.2	388.5	383.2	386.4
35°	4157.0	3935.9	2336.7	1131.3	637.6	469.0	392.8	347.8	329.5	332.7	332.7
37.5°	4532.7	4226.8	2314.1	1092.7	593.6	413.2	338.1	298.4	282.3	283.4	287.7
40°	4969.6	4562.8	2300.2	1019.7	545.3	361.7	293.0	260.8	249.0	244.7	243.6
42.5°	5435.4	4888.0	2302.3	937.0	485.1	315.6	261.9	235.1	224.3	221.1	220.0
45°	5903.4	5198.2	2305.5	851.2	421.8	280.1	239.4	216.8	210.4	206.1	206.1
47.5°	6343.4	5462.2	2245.4	758.9	359.6	253.3	221.1	206.1	200.7	195.3	195.3
50°	6753.5	5638.3	2100.5	651.5	310.2	231.8	207.2	196.4	191.1	185.7	185.7
52.5°	7072.2	5666.2	1861.2	541.0	275.8	215.7	198.6	188.9	182.5	177.1	176.0
55°	7213.9	5491.2	1520.9	437.9	249.0	201.8	190.0	180.3	172.8	167.4	166.4
57.5°	7177.4	5123.1	1186.0	352.1	223.3	187.8	179.2	172.8	164.2	155.6	154.6
60°	6998.2	4630.4	894.1	293.0	199.6	172.8	167.4	162.1	150.3	137.4	135.2
62.5°	6688.0	4011.1	637.6	242.6	173.9	155.6	153.5	149.2	132.0	108.4	106.3
65°	6213.6	3258.7	429.3	201.8	149.2	136.3	137.4	129.9	107.3	80.5	78.4
67.5°	5520.2	2382.8	274.8	165.3	124.5	113.8	114.8	110.6	91.2	68.7	65.5
70°	4636.8	1577.8	179.2	125.6	99.8	88.0	94.5	95.5	77.3	55.8	53.7
72.5°	3399.3	931.7	125.6	93.4	73.0	61.2	77.3	79.4	62.3	41.9	39.7
75°	1937.4	442.2	94.5	67.6	45.1	42.9	60.1	60.1	42.9	27.9	25.8
77.5°	813.6	184.6	66.5	44.0	25.8	24.7	40.8	37.6	21.5	12.9	12.9
80°	235.1	82.6	35.4	21.5	10.7	9.7	16.1	11.8	5.4	2.1	2.1
82.5°	92.3	36.5	14.0	8.6	4.3	4.3	2.1	0.0	0.0	0.0	0.0
85°	54.7	15.0	6.4	3.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	14.0	3.2	2.1	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)