

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: P971559

Luminaire Tested: **NAV-SB6D-830-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971559
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-830-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48457.9 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 440.1
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



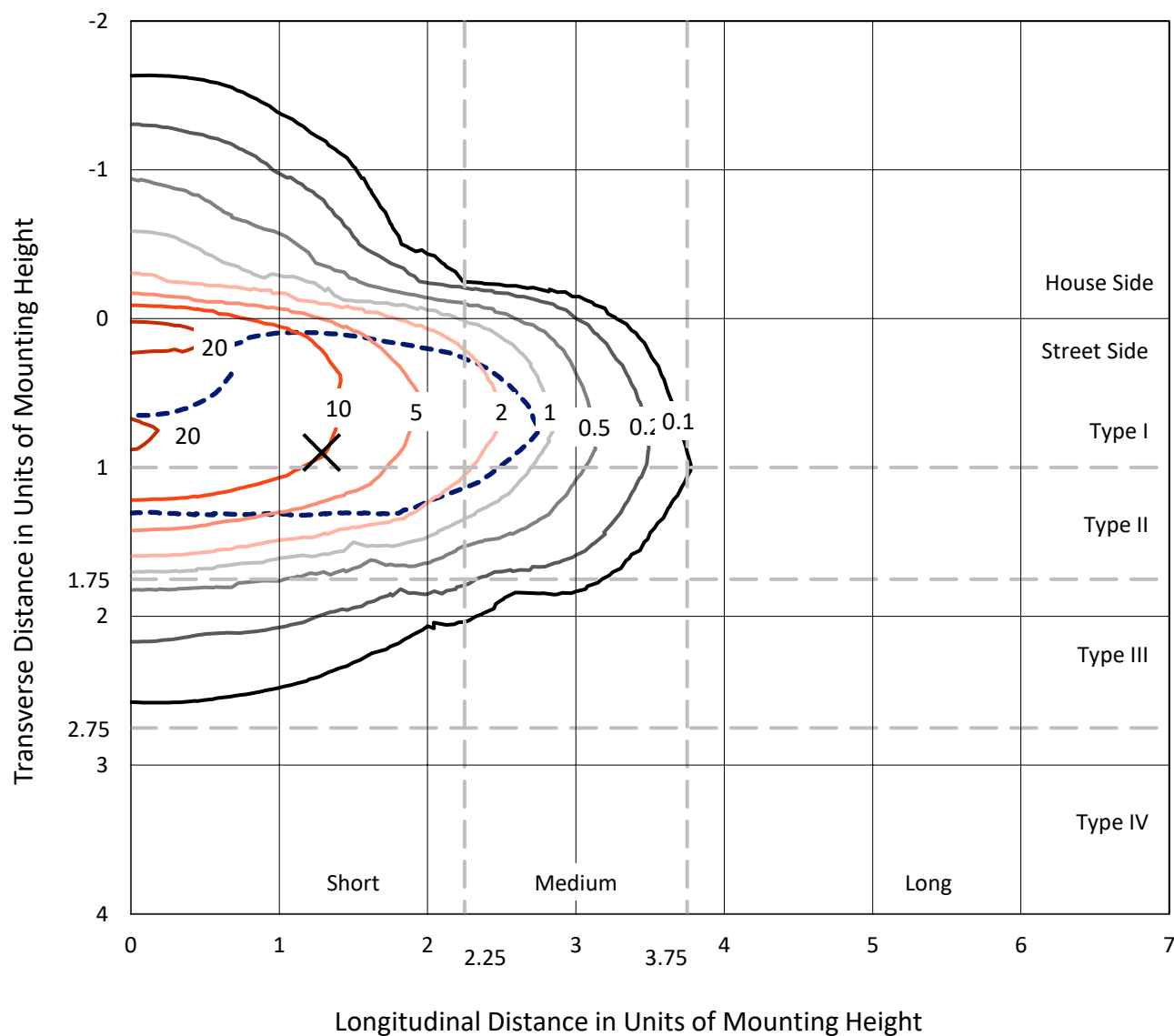
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

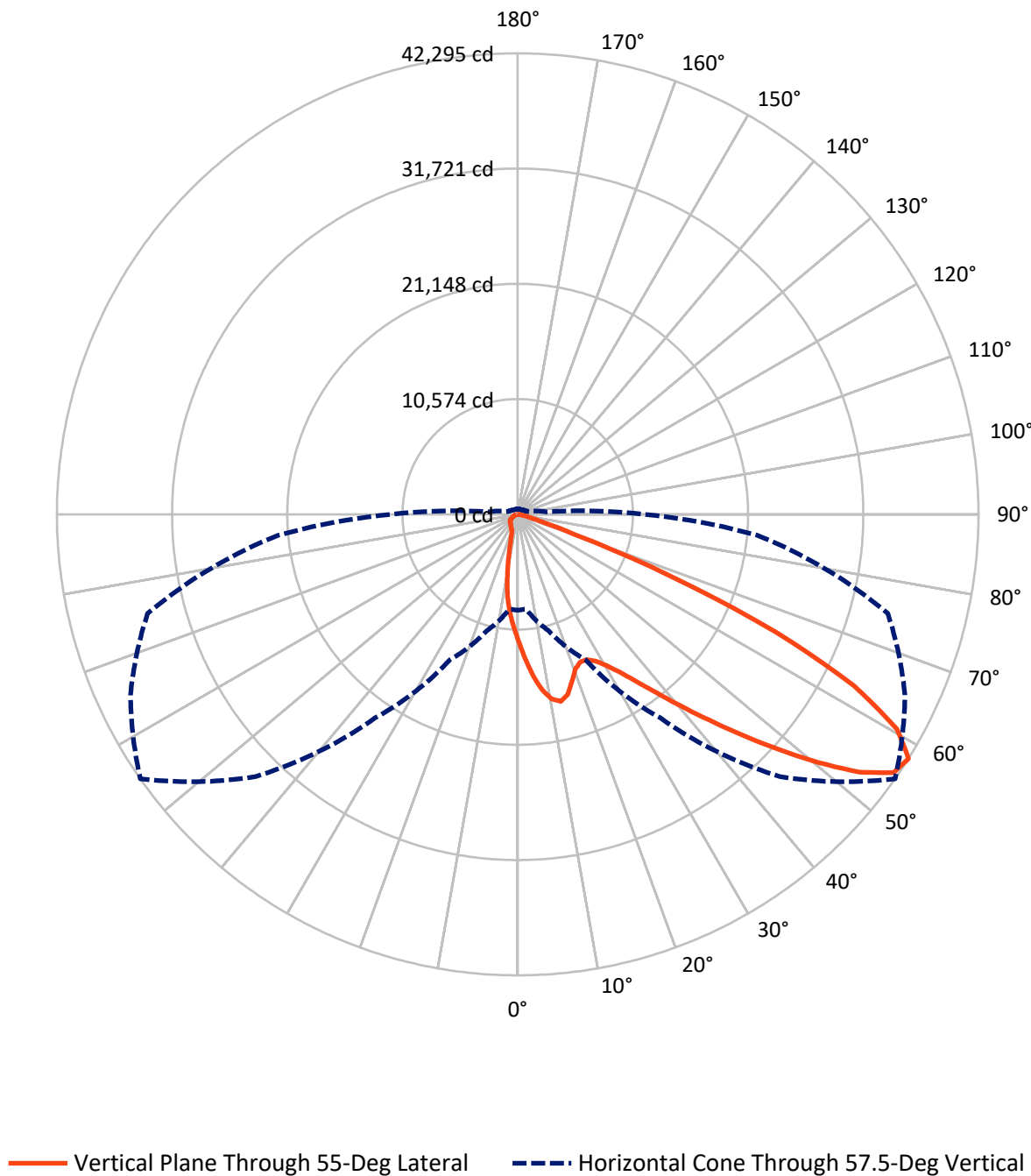


Based on 25 foot mounting height. Maximum calculated value = 26.7 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3784.4	0.0	3784.4
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	44673.5	0.0	44673.5
	% Fixture	92.2	0.0	92.2
Total	Lumens	48457.9	0.0	48457.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1086.5	2.2
10°-20°	2624.4	5.4
20°-30°	4199.1	8.7
30°-40°	7107.2	14.7
40°-50°	11668.5	24.1
50°-60°	12824.5	26.5
60°-70°	7356.1	15.2
70°-80°	1503.1	3.1
80°-90°	88.7	0.2
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°	48457.9	100.0
0°-180°	48457.9	100.0

Coefficient of Utilization



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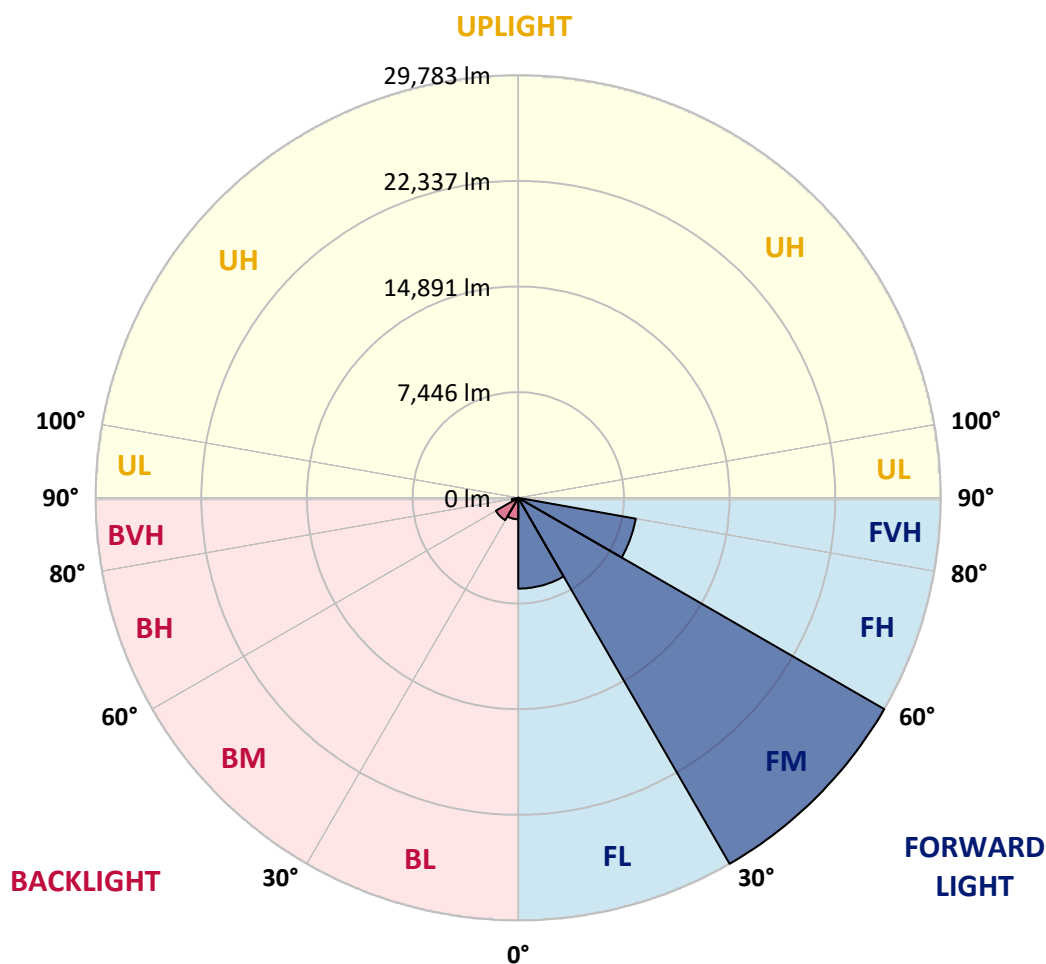
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6399.2	13.2			
FM	(30°-60°)	29782.6	61.5			
FH	(60°-80°)	8409.1	17.4			G4/12000
FVH	(80°-90°)	82.7	0.2			G1/100
BL	(0°-30°)	1510.8	3.1	B3/2500		
BM	(30°-60°)	1817.5	3.8	B2/2500		
BH	(60°-80°)	450.1	0.9	B1/500		G1/500
BVH	(80°-90°)	6.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	11677.2	11677.2	11677.2	11677.2	11677.2	11677.2	11677.2	11677.2	11677.2	11677.2	11677.2
2.5°	14488.9	14306.6	14279.7	14243.9	13897.3	13637.3	13260.8	12848.5	12385.3	11913.2	11704.1
5°	16738.9	16595.5	16568.5	16401.2	16006.8	15564.5	14895.3	14049.7	13186.1	12170.1	11733.9
7.5°	17175.1	17148.2	17270.7	17264.8	17211.0	16861.4	16296.7	15289.7	13992.9	12487.0	11811.6
10°	15229.9	15298.6	15663.1	15982.9	16846.4	17348.4	17225.9	16395.3	14823.6	12848.5	11898.3
12.5°	13458.0	13377.4	13637.3	13998.8	15002.8	16496.9	17611.3	17318.5	15773.7	13257.9	12026.7
15°	12346.4	12313.6	12460.0	12627.4	13392.2	14898.3	17163.1	18068.5	16688.0	13741.9	12221.0
17.5°	11990.9	11964.0	12008.8	12050.6	12546.7	13712.0	16096.4	18528.7	17563.6	14294.6	12436.1
20°	12280.7	12244.9	12238.9	12206.0	12412.2	13207.0	15131.3	18561.5	18349.3	14796.7	12621.3
22.5°	13126.4	13084.5	12938.1	12806.7	12824.6	13275.7	14701.1	18232.9	18941.0	15265.7	12737.9
25°	14659.2	14590.5	14285.7	13843.4	13562.6	13753.9	14766.8	17799.6	19505.8	15633.3	12681.1
27.5°	16577.5	16487.8	16096.4	15439.1	14796.7	14563.6	15241.9	17500.8	19974.9	15914.1	12558.6
30°	18457.0	18340.4	17955.0	17444.1	16505.8	15770.8	16099.5	17632.3	20533.6	16207.0	12397.3
32.5°	20485.9	20375.3	19864.3	19230.8	18454.0	17465.0	17273.7	18274.7	21217.9	16616.4	12283.7
35°	23052.6	22879.2	22153.1	21289.6	20464.9	19463.9	18863.4	19383.3	22129.2	17240.8	12346.4
37.5°	25974.8	25741.7	24958.9	23766.7	22690.9	21570.5	20799.6	20907.1	23464.9	18077.5	12540.7
40°	28729.7	28517.7	27794.5	26671.0	25320.5	23960.9	23139.2	22900.1	25308.5	19096.4	12881.4
42.5°	30382.1	30190.9	29886.1	29411.0	28272.6	26886.2	25849.3	25332.4	27489.7	20315.5	13296.7
45°	30474.8	30307.4	30716.8	31269.6	31045.5	30122.2	28858.3	27911.1	29679.9	21459.9	13726.9
47.5°	28992.7	28879.2	30122.2	32052.5	33014.5	33403.0	32237.7	30274.6	31487.7	22281.7	13903.2
50°	24952.9	24911.1	27468.8	31012.6	33764.5	36277.5	35802.4	32473.7	32889.1	22705.9	13735.9
52.5°	21636.2	21483.8	22974.9	27683.9	32673.9	37789.4	39286.4	34631.1	33869.2	22786.6	13344.5
55°	16410.1	16275.7	18146.2	22114.3	29157.0	37251.6	41835.2	36857.2	34571.3	22580.4	12642.2
57.5°	8802.7	8719.1	11082.5	14719.0	22792.6	34024.6	42295.3	39211.7	35162.9	22033.6	11659.3
60°	3427.3	3412.3	4296.8	7141.4	13852.5	27680.9	39973.7	40625.1	35533.5	21361.3	10837.5
62.5°	2073.7	2118.5	2262.0	3206.1	6119.5	17196.0	34622.1	39017.4	35781.5	20745.8	10159.3
65°	1715.1	1718.1	1736.0	2202.2	2931.2	7195.1	26064.4	33728.8	35168.9	19649.1	9197.1
67.5°	1470.1	1497.0	1565.7	1748.0	2067.7	3155.4	15005.8	26127.1	31442.9	17097.4	7697.1
70°	1159.4	1195.3	1281.9	1437.3	1595.6	1975.1	5545.8	17384.3	24020.7	12887.3	5820.7
72.5°	977.0	974.1	1019.0	1168.3	1266.9	1389.4	2133.4	9740.9	13960.0	6152.4	2880.5
75°	755.9	785.9	842.7	977.0	1036.9	1007.0	1156.4	3558.7	5001.9	1864.5	980.1
77.5°	591.6	615.5	666.4	797.8	857.5	714.1	666.4	1272.8	1607.5	669.3	442.2
80°	265.9	286.9	454.2	588.7	699.2	493.0	361.5	651.4	714.1	304.7	224.1
82.5°	47.8	80.7	265.9	310.8	358.5	319.7	188.3	337.6	349.6	122.5	77.7
85°	3.0	5.9	92.7	113.6	143.4	104.6	56.8	134.5	116.5	41.8	29.9
87.5°	0.0	0.0	0.0	3.0	3.0	15.0	17.9	23.9	17.9	15.0	12.0
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	11677.2	11677.2	11677.2	11677.2	11677.2	11677.2	11677.2	11677.2	11677.2	11677.2
2.5°	11488.9	11064.6	10652.3	10314.6	10117.4	9782.8	9561.6	9525.8	9433.2	9513.8
5°	11267.8	10508.8	9740.9	9053.7	8488.9	7759.9	7216.1	6986.0	6785.8	6854.5
7.5°	11163.2	9965.0	8769.8	7595.6	6388.4	5223.1	4356.6	3994.9	3720.0	3758.9
10°	11022.7	9400.3	7526.8	5734.0	4117.5	2967.1	2369.5	2148.4	2025.9	2028.9
12.5°	10915.2	8725.0	6083.6	3887.4	2506.9	1894.4	1709.2	1655.4	1619.5	1622.5
15°	10861.4	7930.2	4658.3	2590.6	1792.8	1604.5	1559.7	1535.9	1512.0	1508.9
17.5°	10771.8	7045.7	3409.4	1891.4	1568.7	1503.0	1464.1	1437.3	1407.3	1401.4
20°	10637.3	6041.8	2492.0	1598.6	1470.1	1419.3	1365.5	1329.6	1293.9	1287.8
22.5°	10389.3	4981.0	1915.3	1479.1	1398.4	1341.6	1275.9	1234.1	1198.2	1192.2
25°	9929.2	3986.0	1613.6	1404.4	1335.7	1266.9	1195.3	1138.5	1105.6	1099.6
27.5°	9346.5	3131.5	1464.1	1335.7	1255.0	1192.2	1111.5	1057.8	1027.9	1021.9
30°	8659.3	2411.3	1377.5	1258.0	1159.4	1105.6	1033.8	989.0	971.1	971.1
32.5°	7918.2	1927.3	1341.6	1180.3	1075.6	1015.9	959.2	941.3	935.2	932.2
35°	7222.0	1673.3	1323.7	1117.6	1001.0	944.2	920.3	923.3	935.2	935.2
37.5°	6603.6	1592.6	1314.8	1072.7	935.2	884.5	899.4	926.3	914.3	914.3
40°	6044.7	1601.6	1308.7	1039.9	881.5	851.6	881.5	860.6	830.7	827.7
42.5°	5617.5	1676.3	1296.8	1012.9	848.6	827.7	815.7	782.9	779.9	785.9
45°	5306.7	1742.0	1293.9	1001.0	812.7	773.9	758.9	726.1	785.9	800.8
47.5°	4939.2	1742.0	1293.9	959.2	753.0	738.0	714.1	678.2	738.0	753.0
50°	4464.1	1631.5	1243.0	911.3	705.2	696.2	654.4	609.6	597.6	606.6
52.5°	3863.5	1431.3	1114.5	845.6	657.3	639.4	588.7	555.8	546.8	546.8
55°	3179.2	1198.2	941.3	750.0	606.6	573.7	537.8	522.9	513.9	508.0
57.5°	2584.6	983.1	755.9	666.4	558.7	516.9	505.0	487.1	472.1	463.1
60°	2121.4	773.9	624.5	591.6	511.0	472.1	469.1	445.3	406.4	400.4
62.5°	1637.4	567.7	525.9	513.9	463.1	430.3	424.2	376.5	316.7	304.7
65°	1156.4	442.2	424.2	451.2	412.4	382.4	367.6	295.8	233.1	224.1
67.5°	812.7	370.5	334.7	394.4	358.5	319.7	310.8	251.0	194.2	188.3
70°	579.6	301.8	274.9	337.6	286.9	280.8	262.9	209.2	158.4	152.4
72.5°	409.4	230.1	212.2	292.8	197.2	242.0	215.1	161.3	119.5	113.6
75°	301.8	164.3	149.4	170.4	143.4	182.2	152.4	107.5	74.7	71.8
77.5°	221.1	104.6	89.7	83.6	83.6	113.6	83.6	44.8	32.9	29.9
80°	155.4	47.8	41.8	35.9	32.9	26.9	12.0	5.9	3.0	3.0
82.5°	92.7	20.9	20.9	15.0	8.9	0.0	0.0	0.0	0.0	0.0
85°	20.9	8.9	8.9	3.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.0	3.0	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

(END OF REPORT)