

# KMSP

Minneapolis-St Paul International Airport

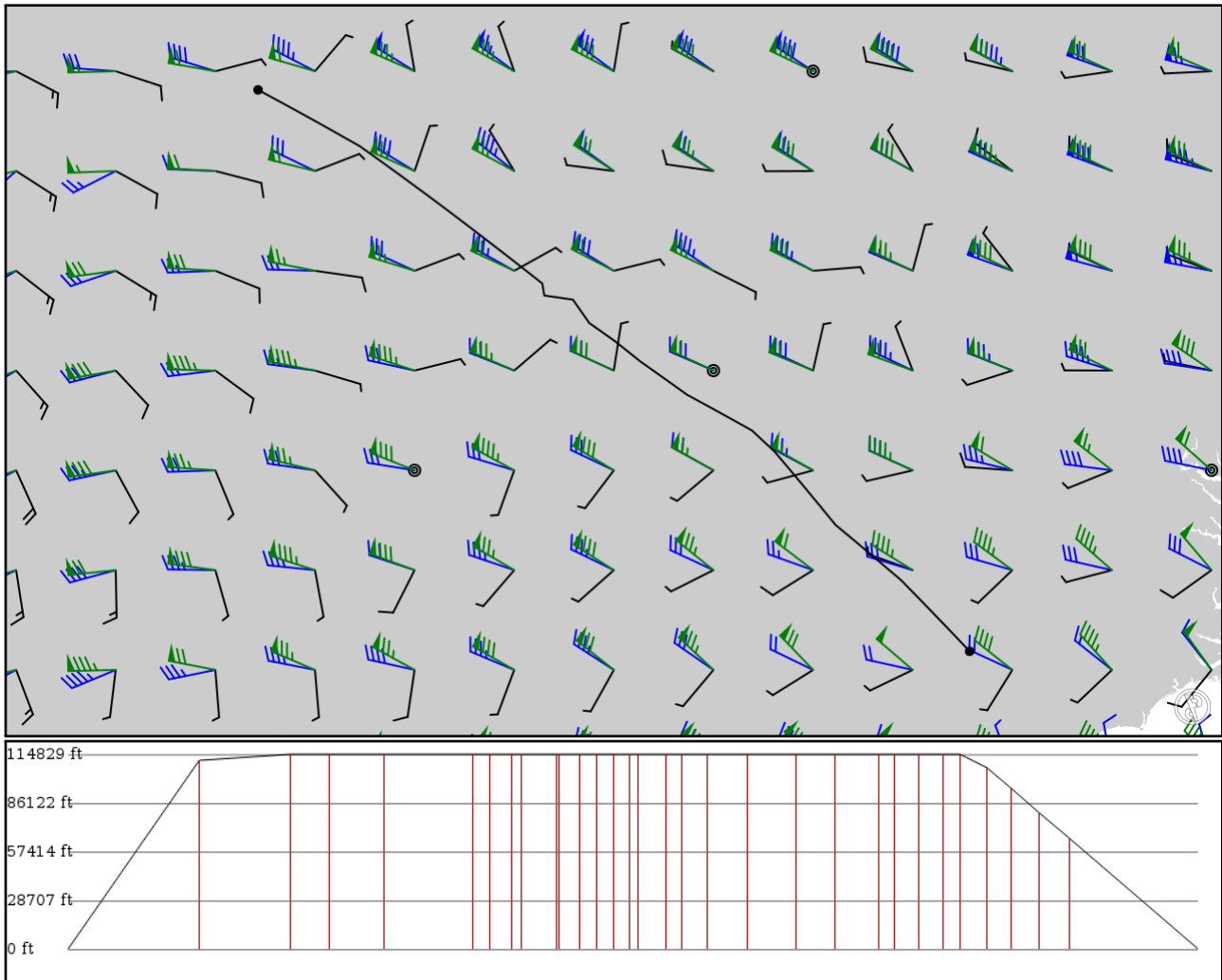
# KCLT

Charlotte Douglas Intl

2024/05/06 2124Z

KMSP ODI **J30** JOT **V171** EON **V24** KENLA **V128** YIXCI **V399** BVT **V51** SHB **V97** CVG **V517** FLM **V339** AZQ **V53** HMV  
KCLT

818.70 nm / 1516.24 km



## Notes

Basic altitude profile:

- Ascent Rate: 2500ft/min
- Ascent Speed: 250kts
- Cruise Altitude: 35000ft
- Cruise Speed: 420kts
- Descent Rate: 1500ft/min
- Descent Speed: 250kts

Options:

- Use NATs: yes
- Use PACOTS: yes
- Use low airways: yes

- Use high airways: yes

## Route

Ident		Via	Lat	Alt	Dist	Name
Type			Lon		(nm)	
KMSP	-	44.88190	0 ft	-		Minneapolis-St Paul International Airport
APT	-	-93.22200	0 m			
ODI	-	43.91230	33,900 ft	95	NODINE	
VOR	-	-91.46750	10,333 m			
SIBER	J30	43.13470	35,000 ft	66	-	
FIX	AWY-HI	-90.39270	10,668 m			
BRIBE	J30	42.79830	35,000 ft	28	-	
FIX	AWY-HI	-89.94040	10,668 m			
COTON	J30	42.31990	35,000 ft	39	-	
FIX	AWY-HI	-89.31220	10,668 m			
JOT	J30	41.54640	35,000 ft	64	JOLIET	
VOR	AWY-HI	-88.31840	10,668 m			
MEDAN	V171	41.34100	35,000 ft	12	-	
FIX	AWY-LO	-88.28520	10,668 m			
OCEDO	V171	41.29280	35,000 ft	15	-	
FIX	AWY-LO	-87.95020	10,668 m			
EON	V171	41.26960	35,000 ft	7	PEOTONE	
VOR	AWY-LO	-87.79110	10,668 m			
KENLA	V24	40.89630	35,000 ft	25	-	
FIX	AWY-LO	-87.52960	10,668 m			
YIXCI	V128	40.86650	35,000 ft	2	-	
FIX	AWY-LO	-87.50890	10,668 m			
ERNEY	V399	40.70380	35,000 ft	14	-	
FIX	AWY-LO	-87.27770	10,668 m			
BVT	V399	40.55620	35,000 ft	12	BOILER (LAFAYETTE)	
VOR	AWY-LO	-87.06940	10,668 m			
ZOFRI	V51	40.41200	35,000 ft	12	-	
FIX	AWY-LO	-86.88740	10,668 m			
OCKEL	V51	40.27860	35,000 ft	11	-	
FIX	AWY-LO	-86.72010	10,668 m			
AZHUP	V51	40.20160	35,000 ft	6	-	
FIX	AWY-LO	-86.62400	10,668 m			
ZIPPY	V51	39.97260	35,000 ft	20	-	
FIX	AWY-LO	-86.29960	10,668 m			
ZAVNE	V51	39.84230	35,000 ft	11	-	
FIX	AWY-LO	-86.11670	10,668 m			
SHB	V51	39.63250	35,000 ft	18	SHELBYVILLE	
VOR	AWY-LO	-85.82430	10,668 m			
MILAN	V97	39.35610	35,000 ft	28	-	
FIX	AWY-LO	-85.31680	10,668 m			
CVG	V97	39.01600	35,000 ft	35	CINCINNATI	
VOR	AWY-LO	-84.70330	10,668 m			
FLM	V517	38.64940	35,000 ft	28	FALMOUTH	
VOR	AWY-LO	-84.31060	10,668 m			
SPROW	V339	38.21130	35,000 ft	31	-	
FIX	AWY-LO	-83.94070	10,668 m			
MASSE	V339	38.05090	35,000 ft	11	-	
FIX	AWY-LO	-83.80670	10,668 m			
TRENT	V339	37.80050	35,000 ft	17	-	
FIX	AWY-LO	-83.59900	10,668 m			
KAVCO	V339	37.55900	35,000 ft	17	-	
FIX	AWY-LO	-83.40020	10,668 m			
AZQ	V339	37.39130	35,000 ft	12	HAZARD	

Ident Type		Via	Lat Lon	Alt	Dist (nm)	Name
VOR	AWY-LO	-83.26300	10,668 m			
RISTE	V53	37.15080	32,600 ft	20	-	
FIX	AWY-LO	-82.97340	9,936 m			
FLENR	V53	36.94560	28,900 ft	17	-	
FIX	AWY-LO	-82.72850	8,809 m			
HILTO	V53	36.69680	24,500 ft	20	-	
FIX	AWY-LO	-82.43540	7,468 m			
HMV	V53	36.43710	19,900 ft	21		HOLSTON MOUNTAIN
VOR	AWY-LO	-82.12960	6,066 m			
KCLT	-	35.21380	0 ft	93		Charlotte Douglas Intl
APT	-	-80.94850	0 m			

## KMSP

Region: UNITED STATES  
Timezone: AMERICA/CHICAGO  
Runways: 4

Elevation: 841 ft / 256 m  
Location: 44.881900 -93.222000  
Magnetic Var: 0.276 W

## METAR

KMSP 062053Z 12018G31KT 10SM FEW090 FEW120 BKN250 23/07 A2976 RMK A02 PK WND 14031/1959 SLP078 T02280072 58036

## TAF

KMSP 062043Z 0621/0724 14016G26KT P6SM SCT080 BKN200 FM070400 12021G35KT P6SM OVC060 FM070700 12018G28KT 6SM -RA

## Frequencies

DEP - 132.97 MHz - MINNEAPOLIS DEPARTURE	DEP - 125.75 MHz - MINNEAPOLIS DEPARTURE
DEP - 124.70 MHz - MINNEAPOLIS DEPARTURE	APP - 126.95 MHz - MINNEAPOLIS APPROACH
APP - 119.30 MHz - MINNEAPOLIS APPROACH	APP - 118.72 MHz - MINNEAPOLIS APPROACH
TWR - 126.70 MHz - MINNEAPOLIS TOWER	TWR - 123.95 MHz - MINNEAPOLIS TOWER
TWR - 123.67 MHz - MINNEAPOLIS TOWER	GND - 133.57 MHz - MINNEAPOLIS GROUND
GND - 127.92 MHz - MINNEAPOLIS GROUND	GND - 121.90 MHz - MINNEAPOLIS GROUND
GND - 121.80 MHz - MINNEAPOLIS GROUND	REC - 120.80 MHz - MINNEAPOLIS D-ATIS
REC - 135.35 MHz - MINNEAPOLIS D-ATIS	COM - 122.95 MHz - MINNEAPOLIS UNICOM
CLD - 133.20 MHz - MINNEAPOLIS CLEARANCE DELIVERY	

## Runways

Ident	Width	Length	Bearing (true) (mag)	Surface	Threshold Offset	Overrun Length
17	150 ft	8,008 ft	169.56	CONCRETE	0 ft	397 ft
	46 m	2,441 m	169.83		0 m	121 m
35	150 ft	8,008 ft	349.56	CONCRETE	0 ft	394 ft
	46 m	2,441 m	349.84		0 m	120 m
12L	150 ft	8,190 ft	121.42	CONCRETE	0 ft	397 ft
	46 m	2,496 m	121.69		0 m	121 m
30R	150 ft	8,190 ft	301.44	CONCRETE	203 ft	394 ft
	46 m	2,496 m	301.71		62 m	120 m
12R	200 ft	9,985 ft	121.42	CONCRETE	0 ft	1,194 ft
	61 m	3,043 m	121.70		0 m	364 m
30L	200 ft	9,985 ft	301.44	CONCRETE	0 ft	781 ft
	61 m	3,043 m	301.72		0 m	238 m
04	150 ft	11,118 ft	44.90	CONCRETE	1,660 ft	0 ft
	46 m	3,389 m	45.18		506 m	0 m
22	150 ft	11,118 ft	224.92	CONCRETE	0 ft	410 ft
	46 m	3,389 m	225.20		0 m	125 m

## Approach Nav aids

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
12L	DME	IPJL	110.70 MHz	18 nm	-	-	813 ft
				33 km	-		813 m
12R	DME	IHKZ	110.30 MHz	18 nm	-	-	841 ft
				33 km	-		841 m
17	DME	ITJZ	110.95 MHz	18 nm	-	-	822 ft
				33 km	-		822 m
30L	DME	IMSP	110.30 MHz	18 nm	-	-	841 ft
				33 km	-		841 m

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
30R	DME	IINN	110.70 MHz	18 nm	-	-	813 ft
				33 km	-		813 m
35	DME	IBMA	110.95 MHz	18 nm	-	-	822 ft
				33 km	-		822 m
12L	LOC-ILS	IPJL	110.70 MHz	18 nm	121.43	-	841 ft
				33 km	121.71		841 m
12R	LOC-ILS	IHKZ	110.30 MHz	18 nm	121.44	-	841 ft
				33 km	121.72		841 m
30L	LOC-ILS	IMSP	110.30 MHz	18 nm	301.44	-	841 ft
				33 km	301.72		841 m
30R	LOC-ILS	IINN	110.70 MHz	18 nm	301.43	-	841 ft
				33 km	301.71		841 m
35	LOC-ILS	IBMA	110.95 MHz	18 nm	349.56	-	841 ft
				33 km	349.84		841 m
04	LOC-LOC	IAPL	109.30 MHz	18 nm	44.92	-	841 ft
				33 km	45.20		841 m
17	LOC-LOC	ITJZ	110.95 MHz	18 nm	169.56	-	841 ft
				33 km	169.84		841 m
22	LOC-LOC	ISIJ	110.50 MHz	18 nm	224.92	-	841 ft
				33 km	225.20		841 m
12L	GS	IPJL	110.70 MHz	10 nm	121.43	3.00	841 ft
				19 km	121.71		841 m
12R	GS	IHKZ	110.30 MHz	10 nm	121.44	3.00	841 ft
				19 km	121.72		841 m
30L	GS	IMSP	110.30 MHz	10 nm	301.44	3.00	841 ft
				19 km	301.72		841 m
30R	GS	IINN	110.70 MHz	10 nm	301.43	3.00	841 ft
				19 km	301.71		841 m
35	GS	IBMA	110.95 MHz	10 nm	349.56	3.00	841 ft
				19 km	349.84		841 m

## KCLT

Region: UNITED STATES  
Timezone: AMERICA/NEW\_YORK  
Runways: 4

Elevation: 748 ft / 228 m  
Location: 35.213800 -80.948500  
Magnetic Var: 8.054 W

## METAR

KCLT 062052Z 25007G14KT 10SM FEW023 SCT033 BKN170 BKN250 26/18 A2995 RMK A02 SLP150 T02560183 56023

## TAF

TAF AMD KCLT 062000Z 0620/0724 23008KT P6SM VCSH SCT019 BKN080 OVC110 FM062200 21006KT P6SM VCSH BKN090 TEMPO 062200

## Frequencies

REC - 121.15 MHz - ATIS (ARRIVAL)	REC - 132.10 MHz - ATIS (DEPARTURE)
COM - 122.95 MHz - UNICOM	CLD - 127.15 MHz - CLEARANCE DELIVERY
GND - 121.80 MHz - CHARLOTTE GROUND	GND - 121.90 MHz - CHARLOTTE GROUND
TWR - 133.35 MHz - CHARLOTTE TOWER	TWR - 126.40 MHz - CHARLOTTE TOWER
TWR - 118.10 MHz - CHARLOTTE TOWER	DEP - 134.75 MHz - CHARLOTTE DEPARTURE
DEP - 128.32 MHz - CHARLOTTE DEPARTURE	DEP - 124.00 MHz - CHARLOTTE DEPARTURE
DEP - 120.50 MHz - CHARLOTTE DEPARTURE	DEP - 120.05 MHz - CHARLOTTE DEPARTURE
APP - 134.75 MHz - CHARLOTTE APPROACH	APP - 128.32 MHz - CHARLOTTE APPROACH
APP - 126.15 MHz - CHARLOTTE APPROACH	APP - 124.00 MHz - CHARLOTTE APPROACH
APP - 120.50 MHz - CHARLOTTE APPROACH	APP - 120.05 MHz - CHARLOTTE APPROACH

## Runways

Ident	Width	Length	Bearing (true) (mag)	Surface	Threshold Offset	Overrun Length
18R	151 ft	9,008 ft	175.98	CONCRETE	0 ft	0 ft
	46 m	2,746 m	184.04		0 m	0 m
36L	151 ft	9,008 ft	355.98	CONCRETE	0 ft	0 ft
	46 m	2,746 m	4.04		0 m	0 m
18C	151 ft	10,009 ft	175.98	CONCRETE	0 ft	0 ft
	46 m	3,051 m	184.03		0 m	0 m
36C	151 ft	10,009 ft	355.98	CONCRETE	0 ft	0 ft
	46 m	3,051 m	4.03		0 m	0 m
18L	151 ft	8,686 ft	176.00	ASPHALT	0 ft	0 ft
	46 m	2,648 m	184.05		0 m	0 m
36R	151 ft	8,686 ft	356.00	ASPHALT	0 ft	0 ft
	46 m	2,648 m	4.05		0 m	0 m
05	151 ft	7,510 ft	48.35	ASPHALT	0 ft	148 ft
	46 m	2,289 m	56.40		0 m	45 m
23	151 ft	7,510 ft	228.36	ASPHALT	0 ft	148 ft
	46 m	2,289 m	236.41		0 m	45 m

## Approach Nav aids

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
18R	DME	IRGS	110.15 MHz	18 nm	-	-	749 ft
				33 km	-		749 m
23	DME	IAPU	109.50 MHz	18 nm	-	-	749 ft
				33 km	-		749 m
36L	DME	IXUU	110.15 MHz	18 nm	-	-	749 ft
				33 km	-		749 m
36R	DME	IBQC	108.90 MHz	18 nm	-	-	749 ft
				33 km	-		749 m

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
05	LOC-ILS	ICLT	110.95 MHz	18 nm	48.37	-	749 ft
				33 km	56.42		749 m
18C	LOC-ILS	IPEP	111.30 MHz	18 nm	175.98	-	748 ft
				33 km	184.03		748 m
18L	LOC-ILS	IVKQ	110.35 MHz	18 nm	176.00	-	748 ft
				33 km	184.05		748 m
18R	LOC-ILS	IRGS	110.15 MHz	18 nm	175.98	-	748 ft
				33 km	184.03		748 m
23	LOC-ILS	IAPU	109.50 MHz	18 nm	228.35	-	748 ft
				33 km	236.40		748 m
36C	LOC-ILS	IDQG	111.70 MHz	18 nm	355.98	-	748 ft
				33 km	4.03		748 m
36L	LOC-ILS	IXUU	110.15 MHz	18 nm	355.98	-	748 ft
				33 km	4.03		748 m
36R	LOC-ILS	IBQC	108.90 MHz	18 nm	356.00	-	748 ft
				33 km	4.05		748 m
05	GS	ICLT	110.95 MHz	10 nm	48.35	3.00	748 ft
				19 km	56.40		748 m
18C	GS	IPEP	111.30 MHz	10 nm	175.98	3.00	748 ft
				19 km	184.03		748 m
18L	GS	IVKQ	110.35 MHz	10 nm	176.00	3.00	748 ft
				19 km	184.05		748 m
18R	GS	IRGS	110.15 MHz	10 nm	175.98	3.00	748 ft
				19 km	184.03		748 m
23	GS	IAPU	109.50 MHz	10 nm	228.35	3.00	748 ft
				19 km	236.40		748 m
36C	GS	IDQG	111.70 MHz	10 nm	355.98	3.00	748 ft
				19 km	4.03		748 m
36L	GS	IXUU	110.15 MHz	10 nm	355.98	3.00	748 ft
				19 km	4.03		748 m
36R	GS	IBQC	108.90 MHz	10 nm	356.00	3.00	748 ft
				19 km	4.05		748 m